

Figure 1. Photograph of test system.

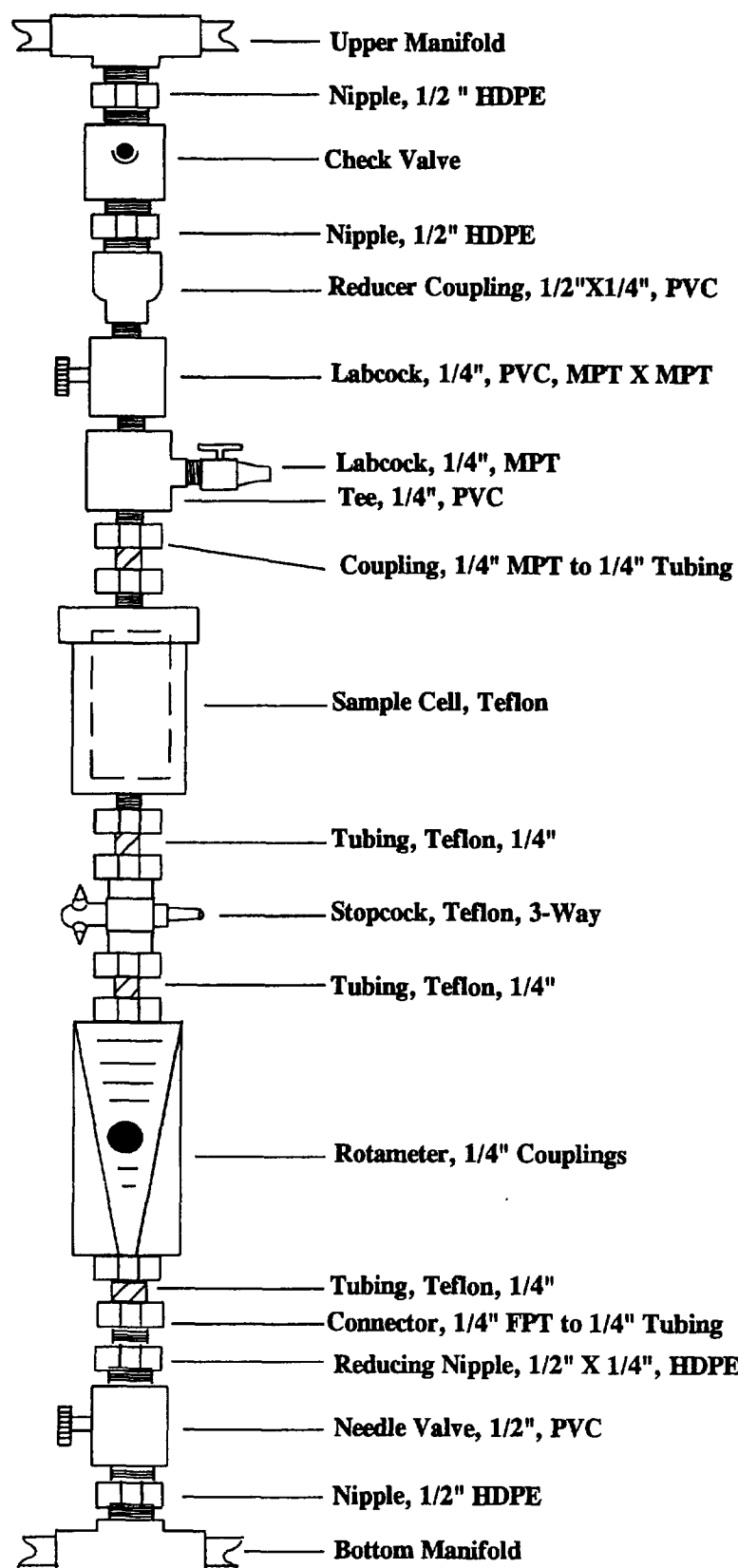


Figure 2. Schematic of individual test loop (not to scale).

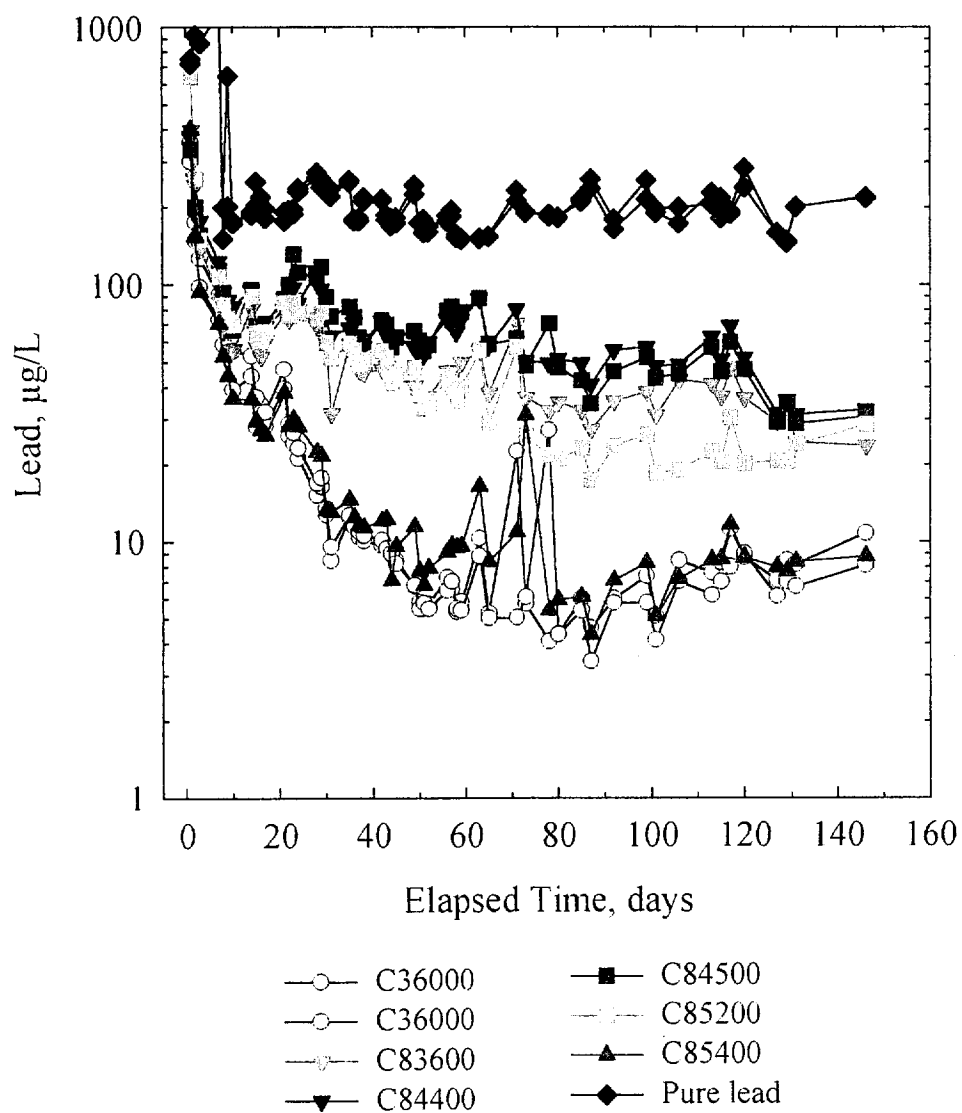


Figure 3. Lead leached from brass and pure lead coupons during test run #1, pH = 8.5.

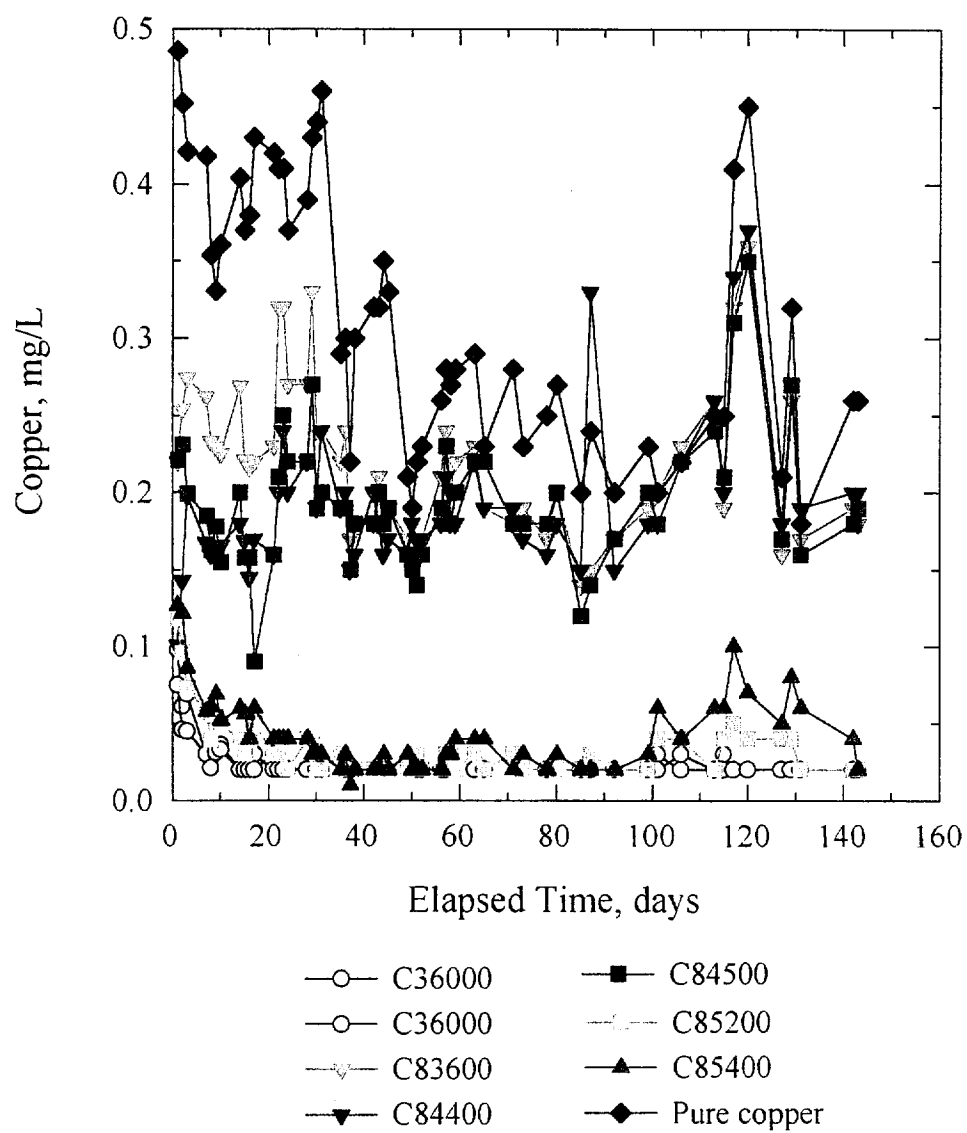


Figure 4. Copper leached from brass and pure copper coupons during test run #1, pH =8.5.

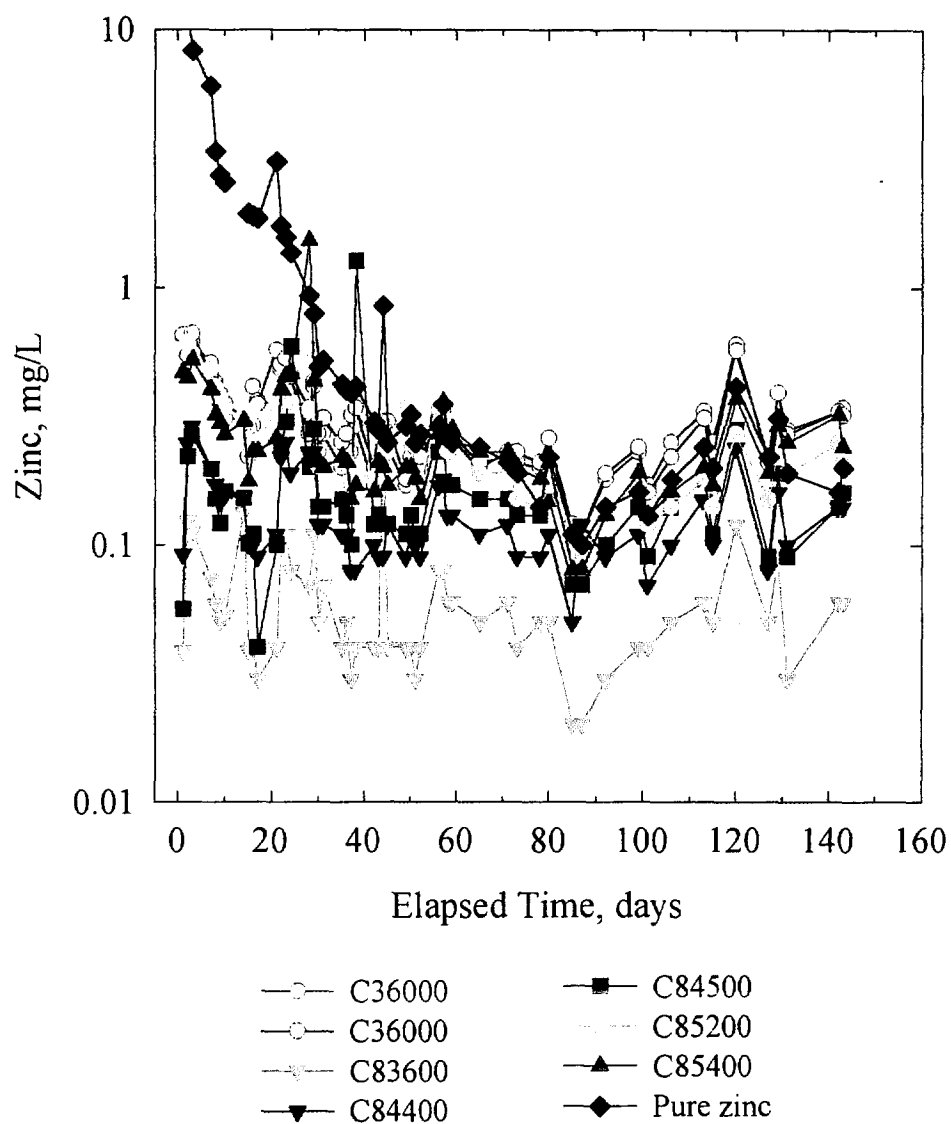


Figure 5. Zinc leached levels from brass and pure zinc coupons during test run #1, pH = 8.5.

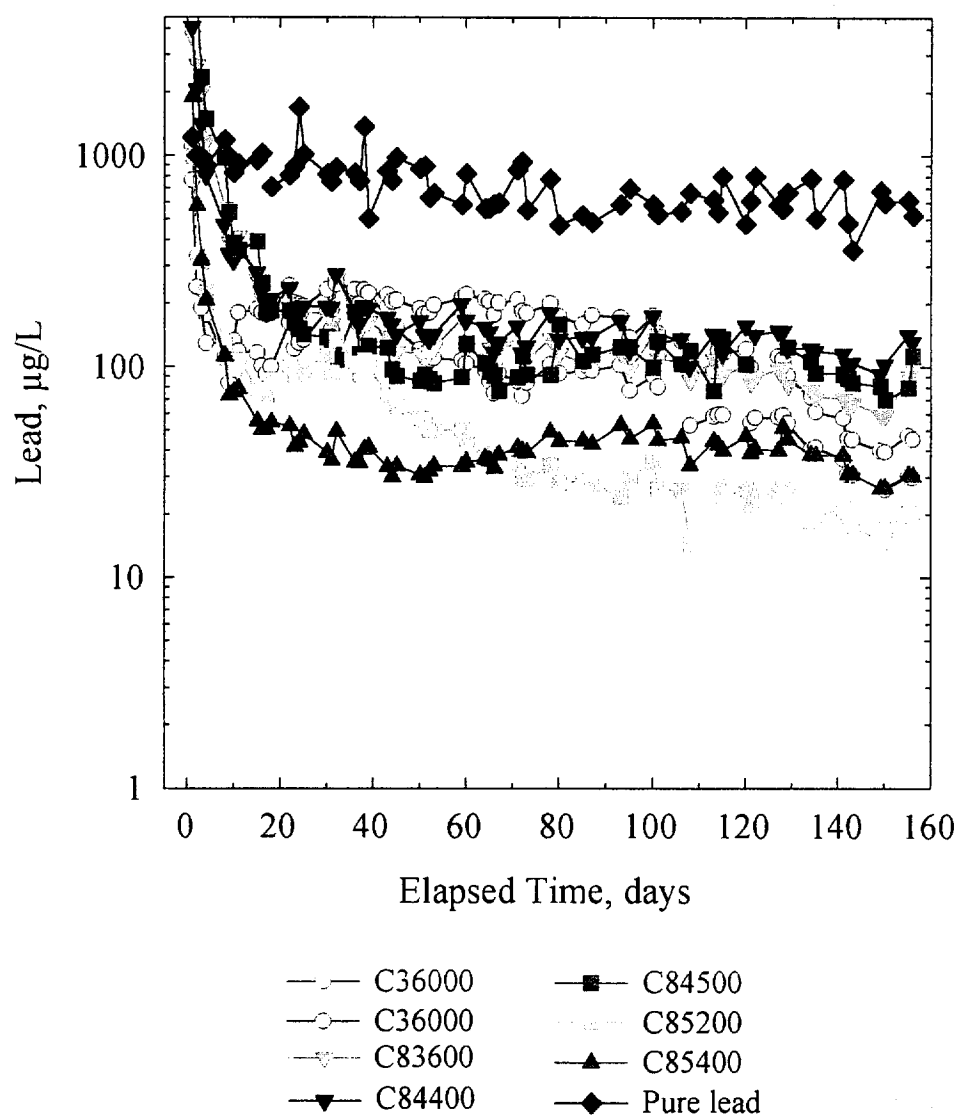


Figure 6. Lead leached from brass and pure lead coupons during test run #2, pH = 7.0.

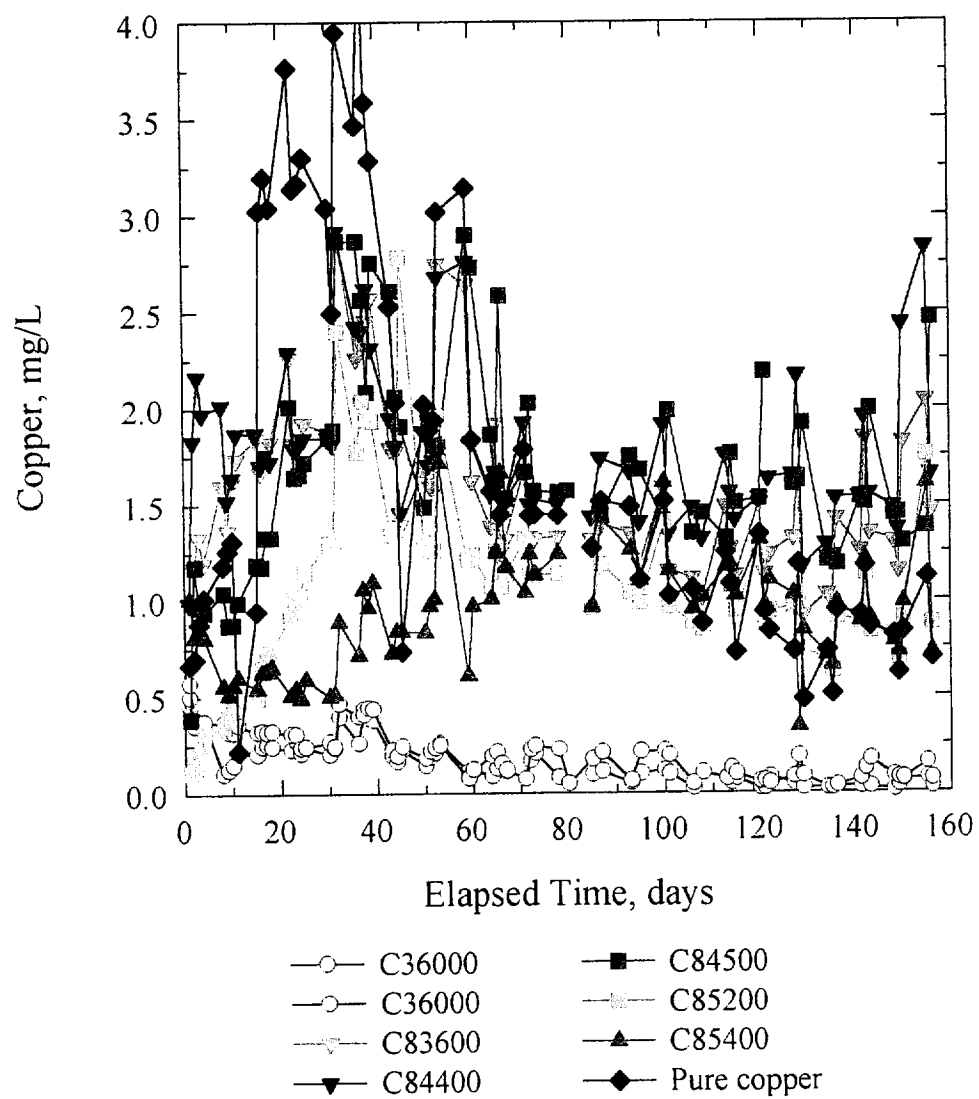


Figure 7. Copper leached from brass and pure copper coupons during test run #2, pH =7.0.

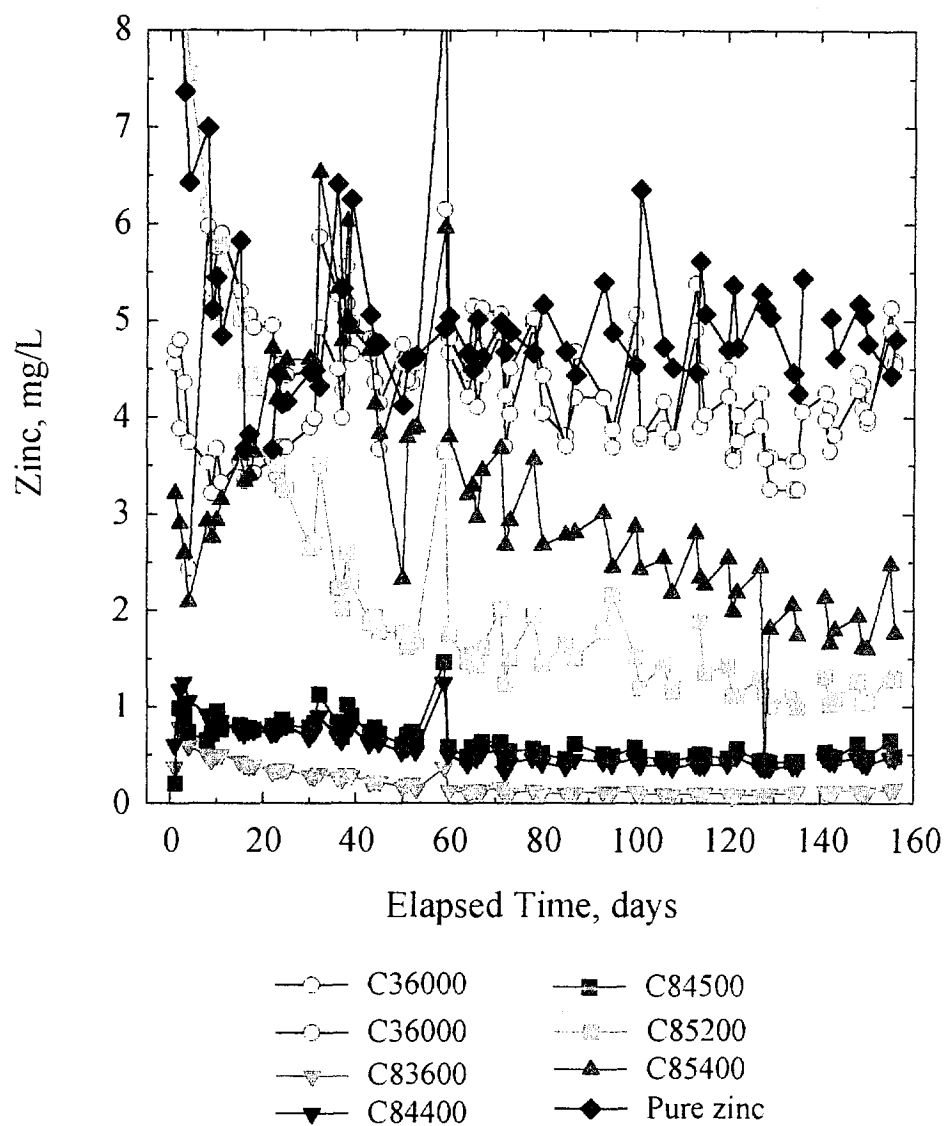


Figure 8. Zinc leached from brass and pure zinc coupons during test run #2, pH =7.0.



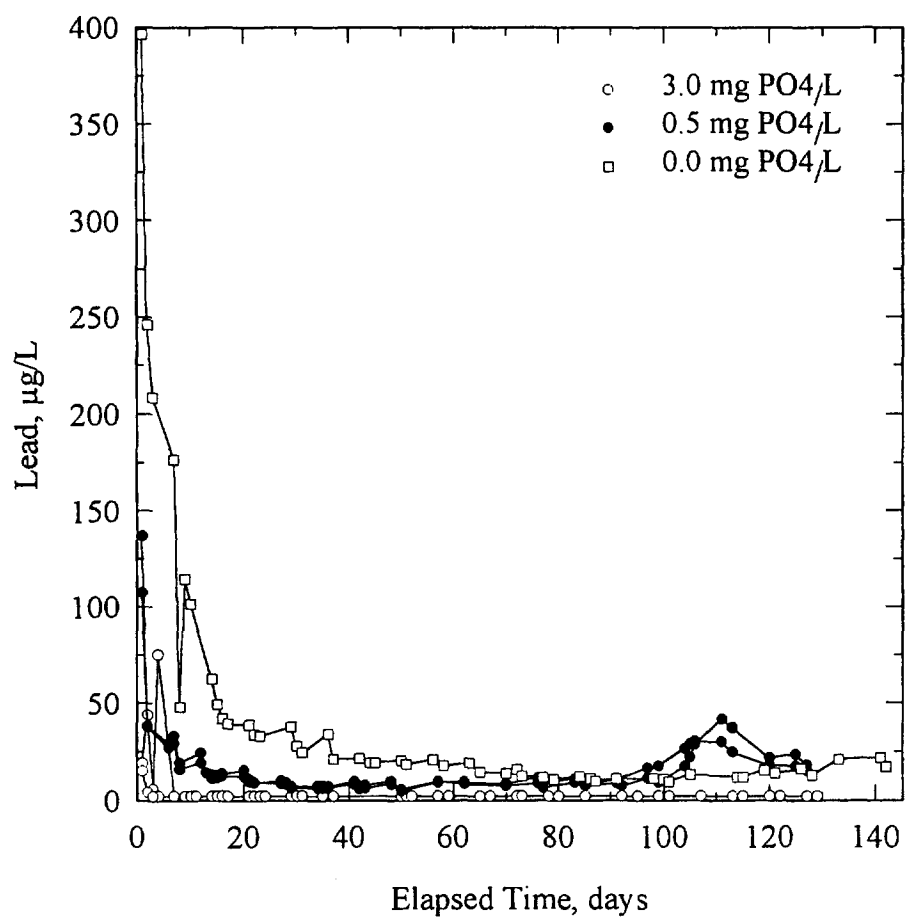


Figure 9. Effect of phosphate on lead leached from C36000 (free-machining brass) coupon at pH 7.5.

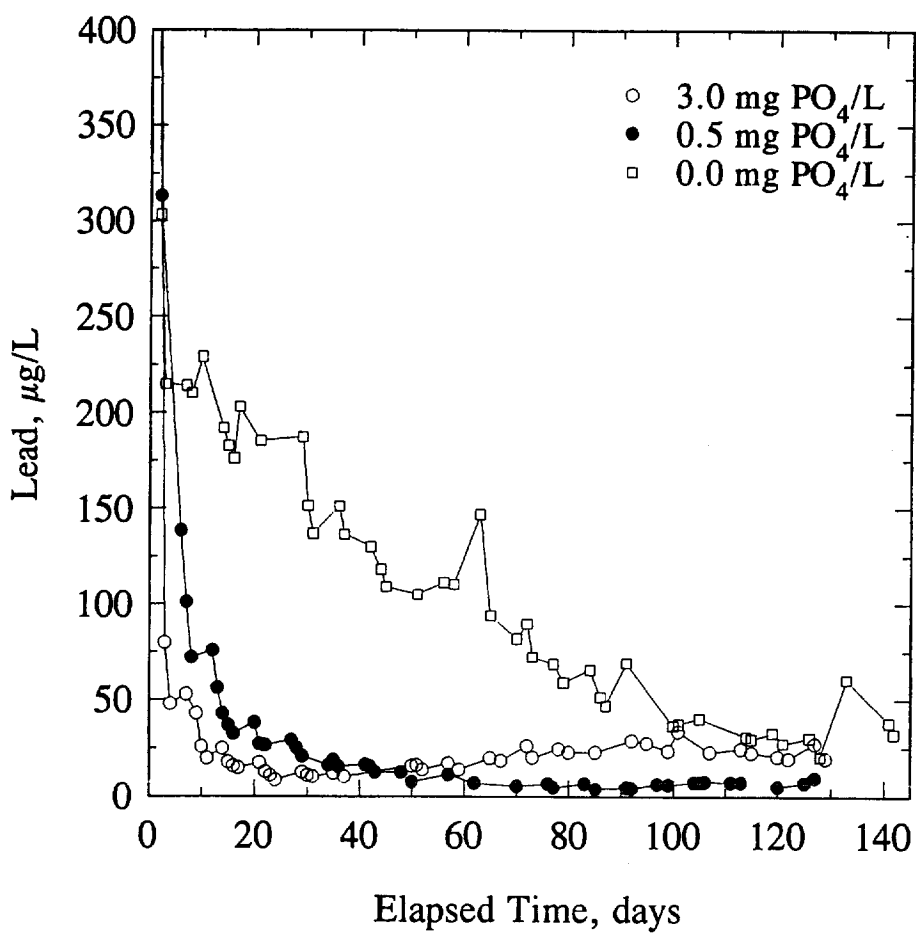


Figure 10. Effect of phosphate on lead leached from C83600 (red brass) coupon at pH 7.5.

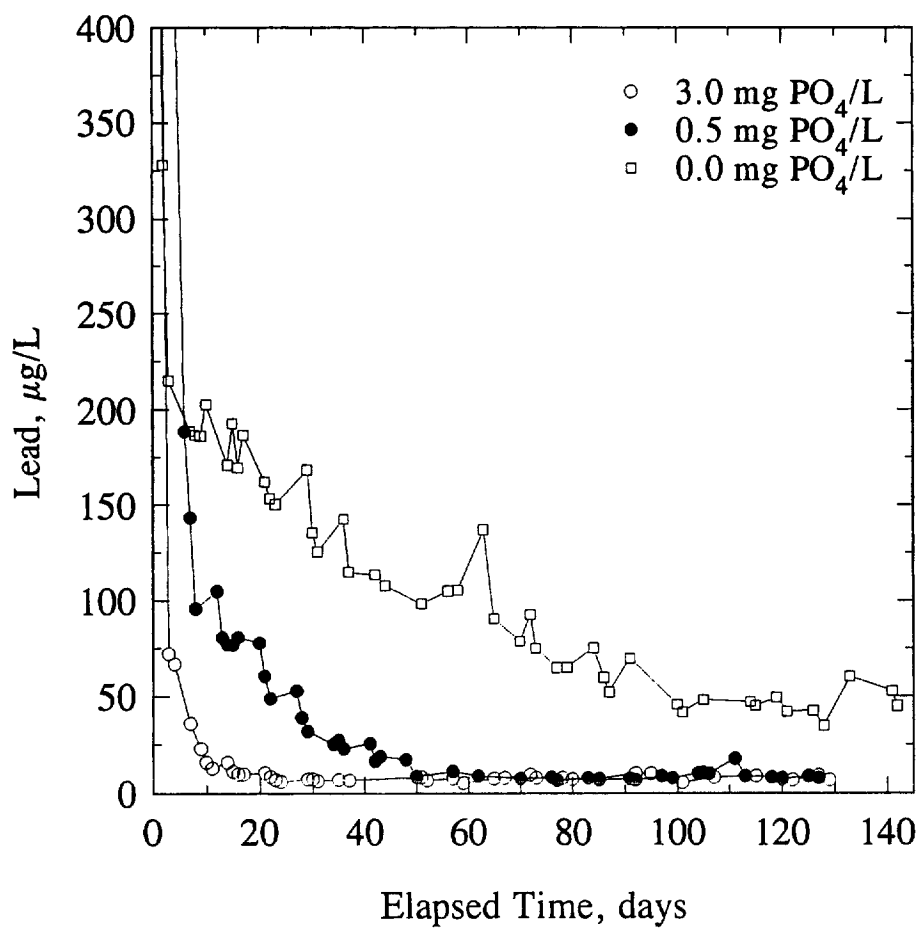


Figure 11. Effect of phosphate on lead leached from C84400 (red brass) coupon at pH 7.5.

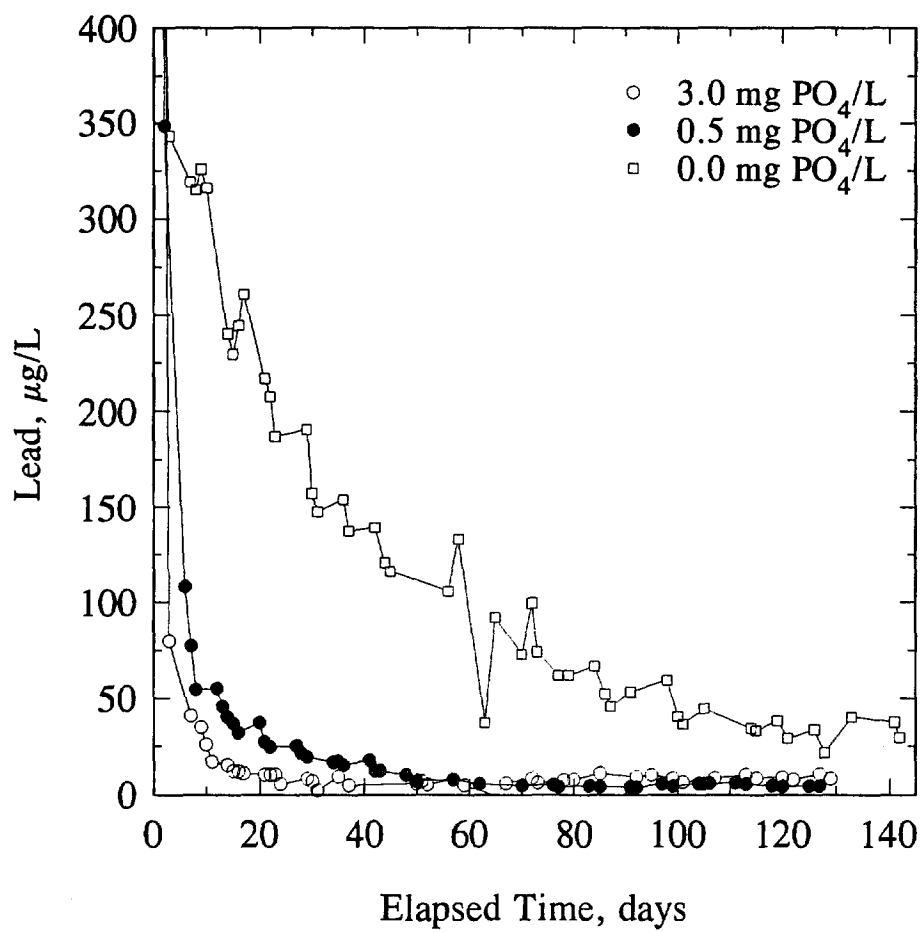


Figure 12. Effect of phosphate on lead leached from C84500 (red brass) coupon at pH 7.5.

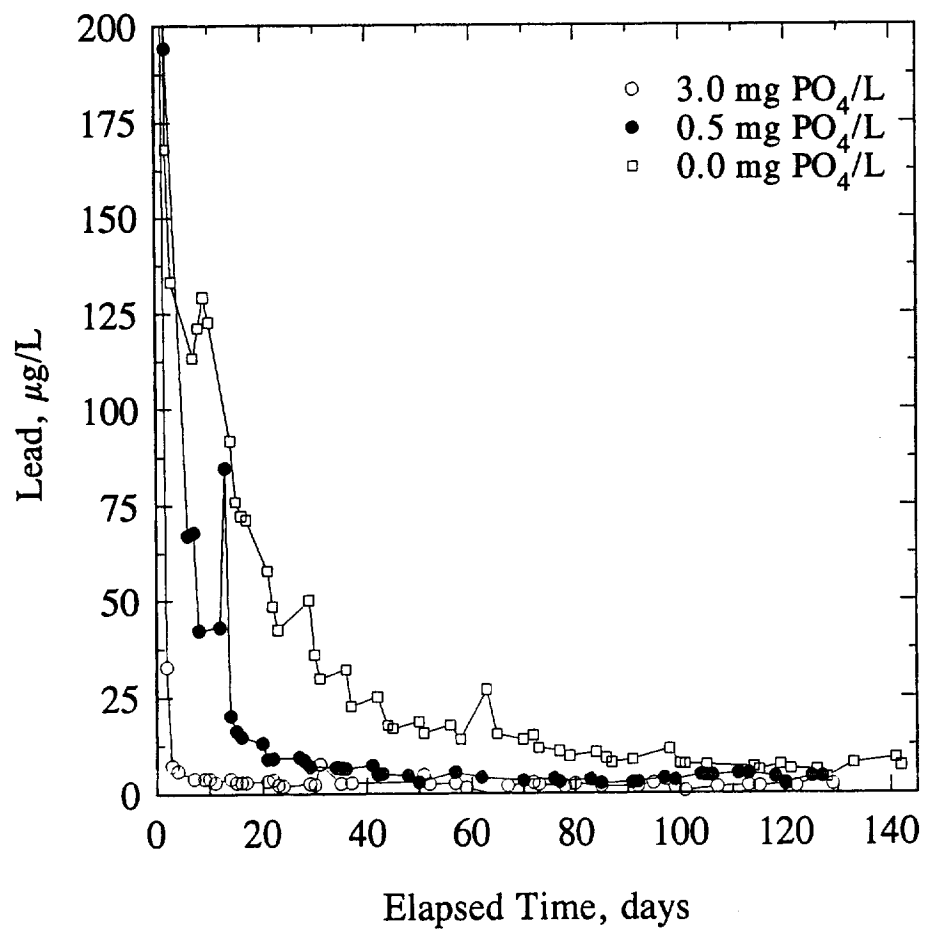


Figure 13. Effect of phosphate on lead leached from C85200 (yellow brass) coupon at pH 7.5.

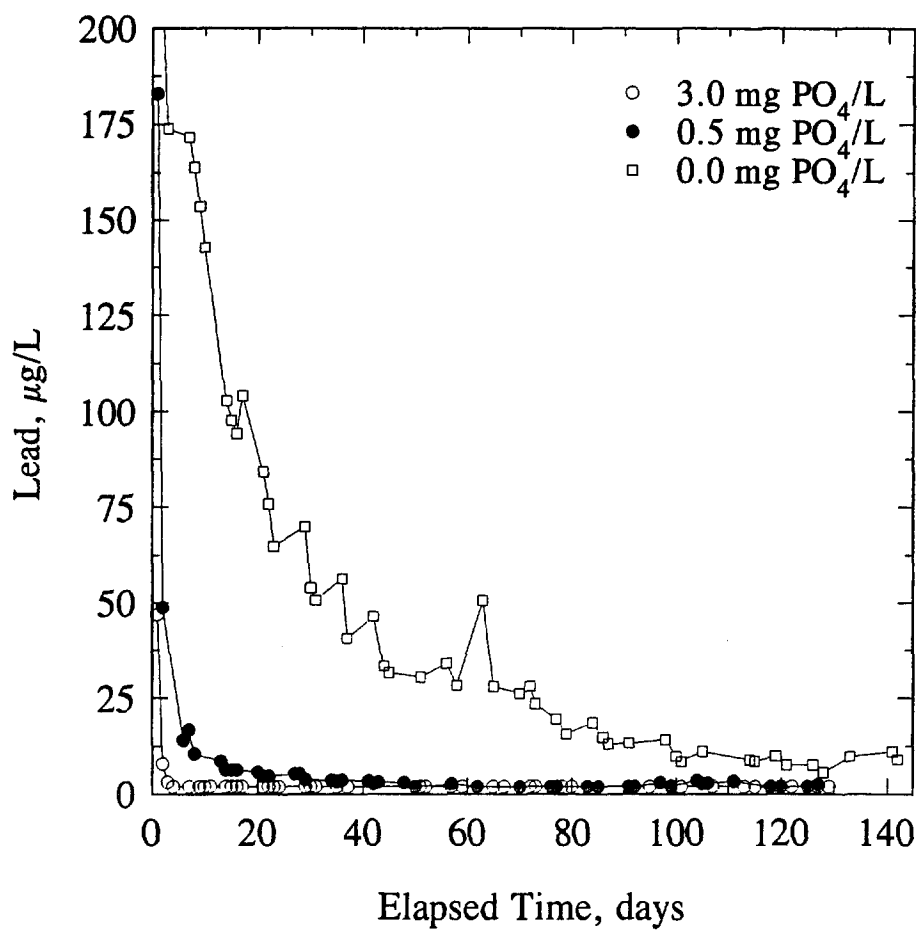


Figure 14. Effect of phosphate on lead leached from C85400 (yellow brass) coupon at pH 7.5.

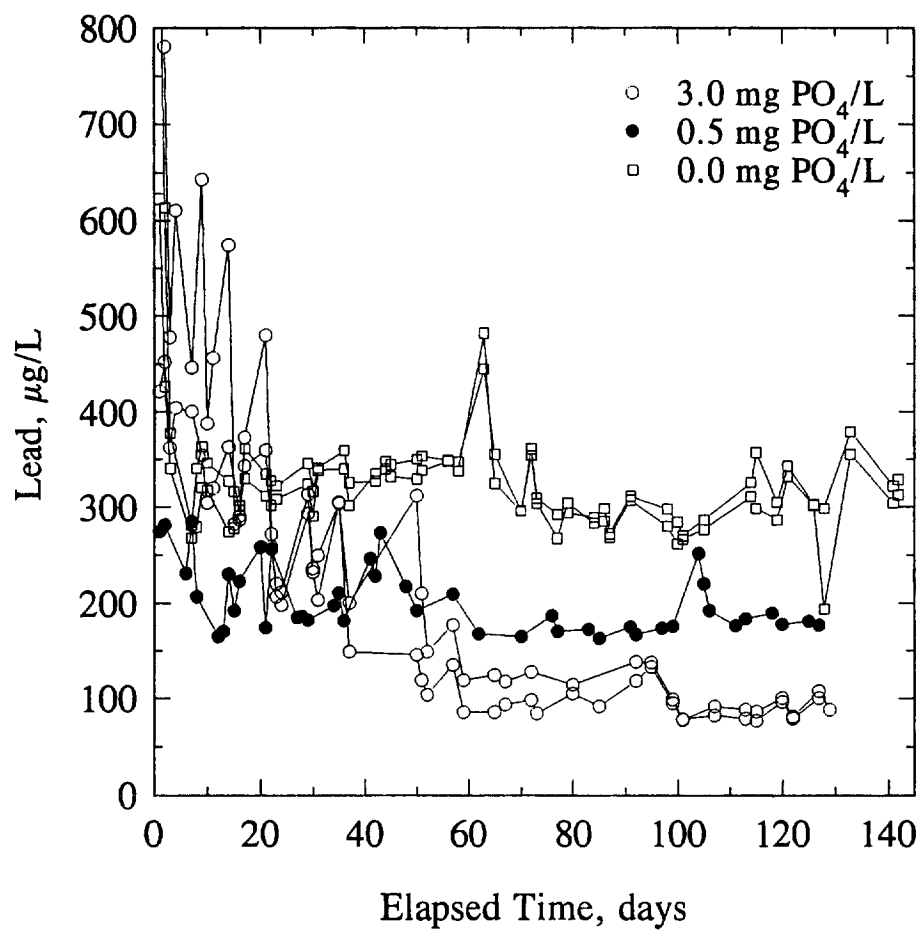


Figure 15. Effect of phosphate on lead leached from pure lead at pH 7.5.

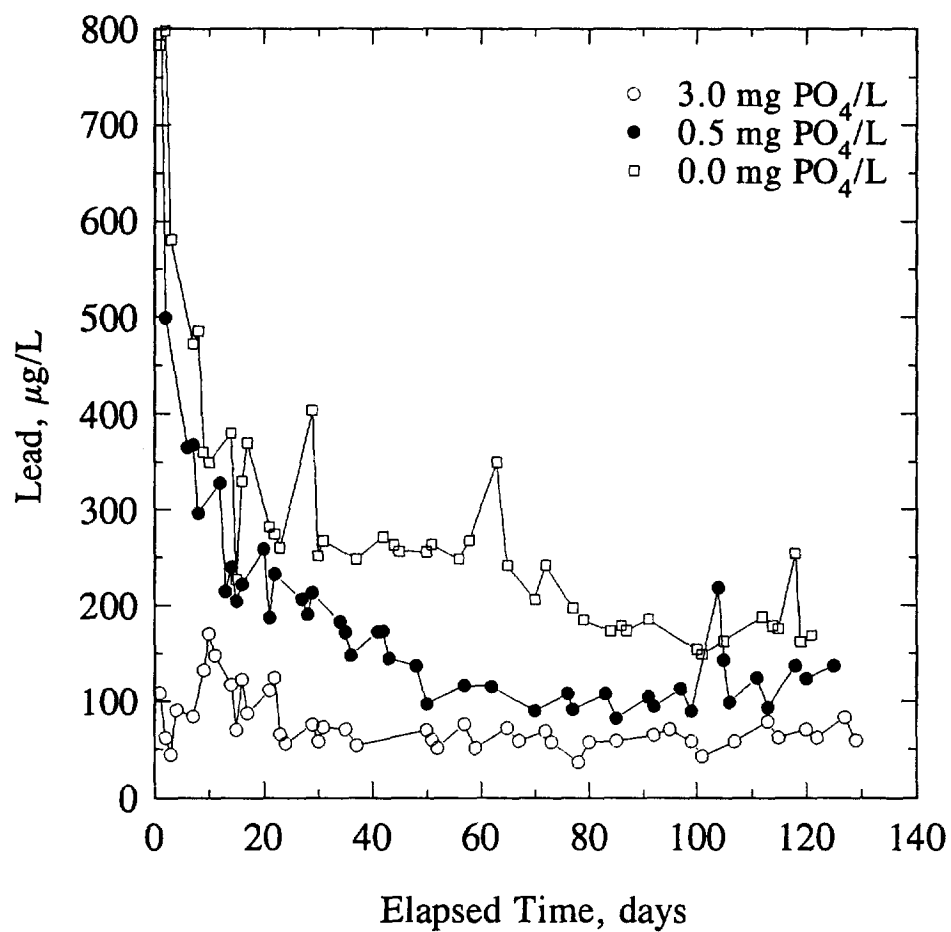


Figure 16. Effect of phosphate on lead leached from 60:40 Sn:Pb solder coupon at pH 7.5.



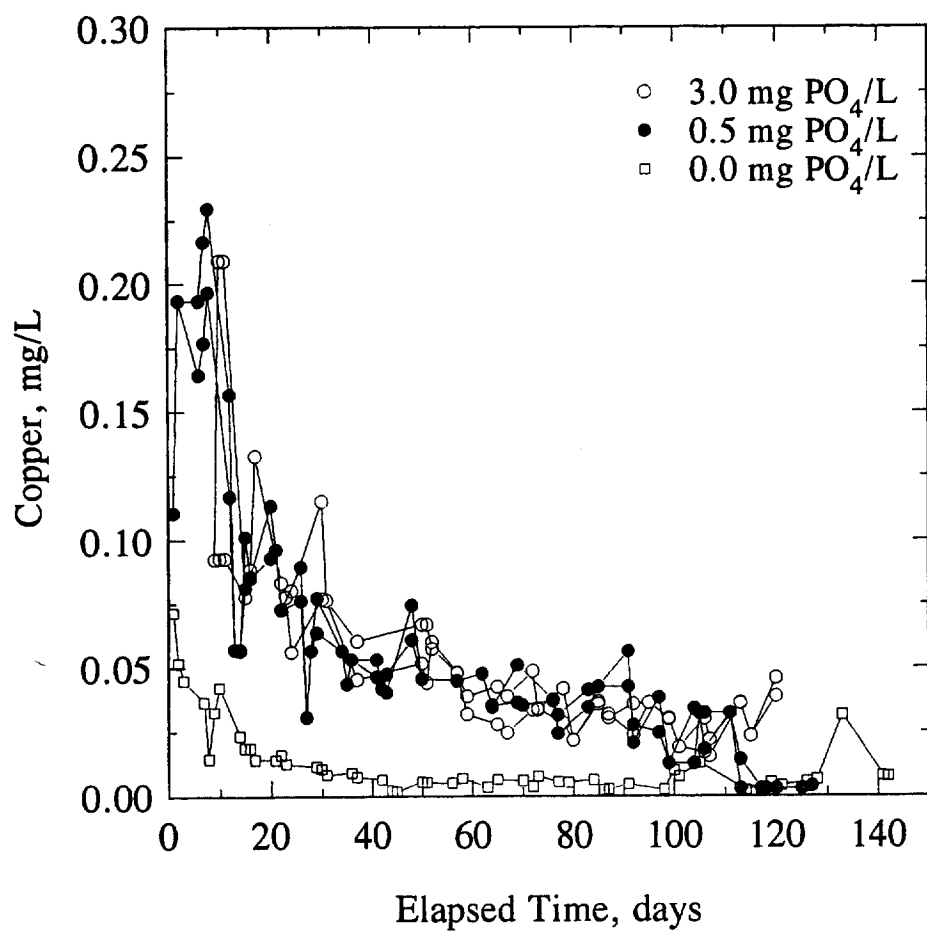


Figure 17. Effect of phosphate on copper leached from C36000 (free-machining brass) coupon at pH 7.5.

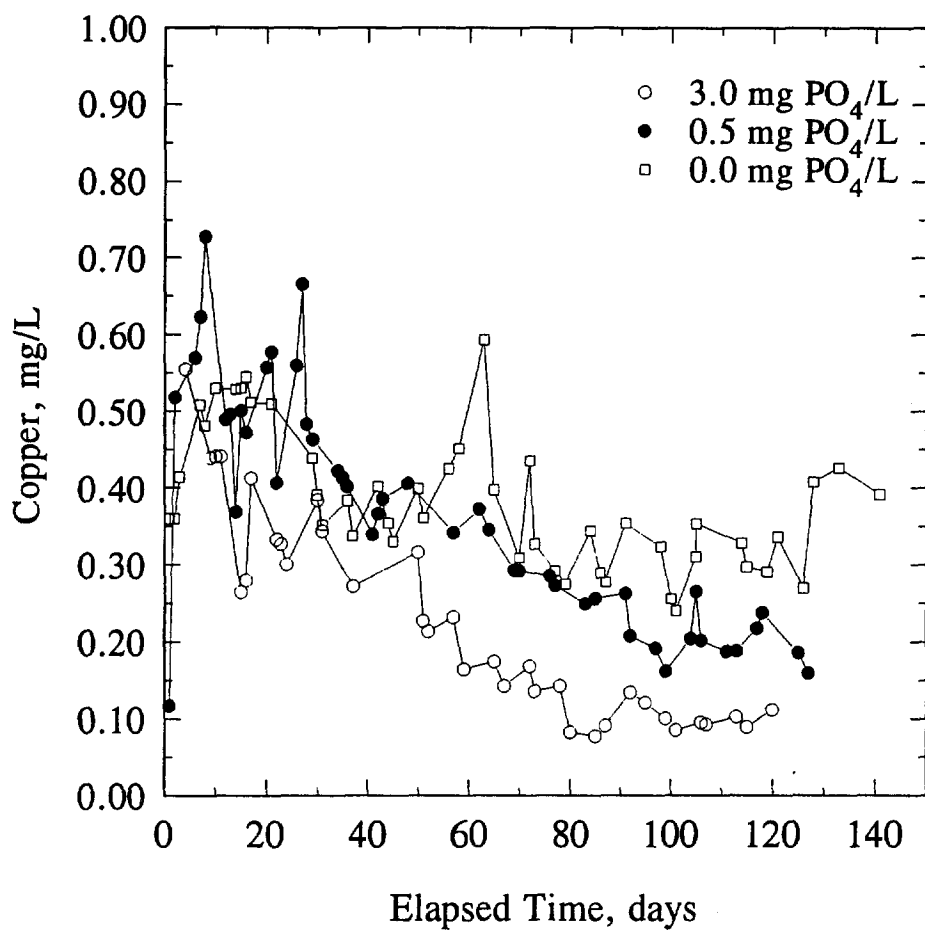


Figure 18. Effect of phosphate on copper leached from C83600 (red brass) coupon at pH 7.5.

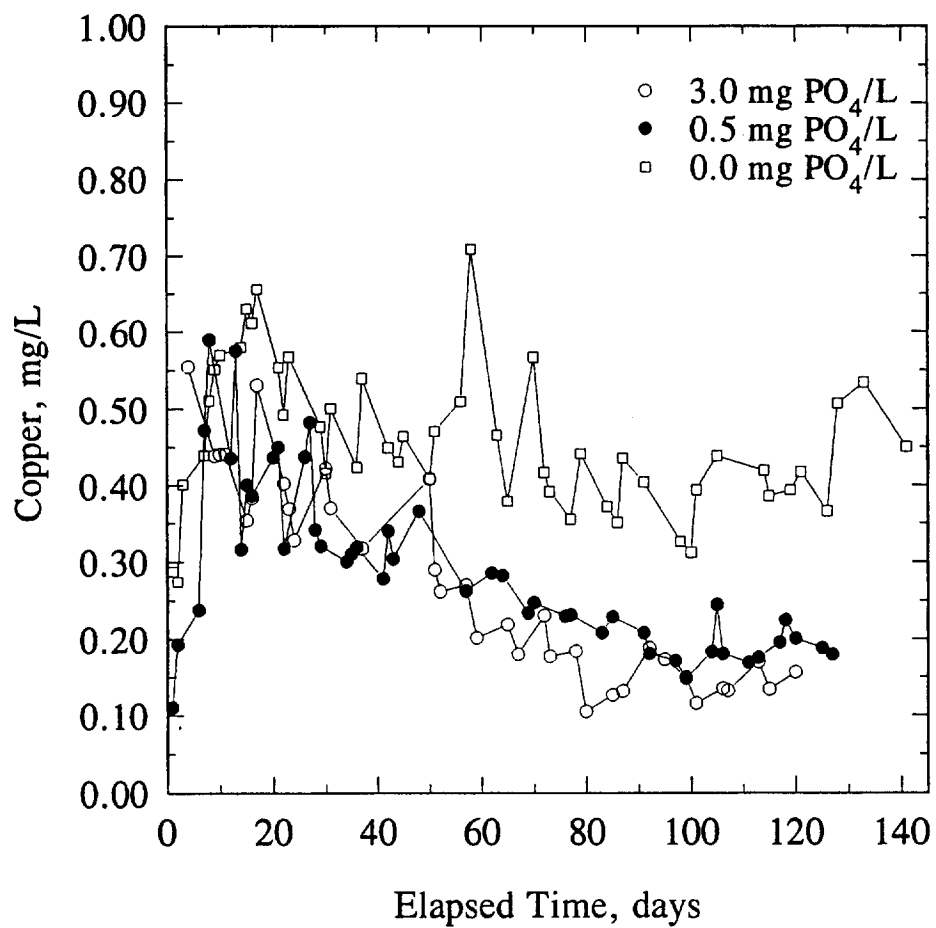


Figure 19. Effect of phosphate on copper leached from C84400 (red brass) coupon at pH 7.5.

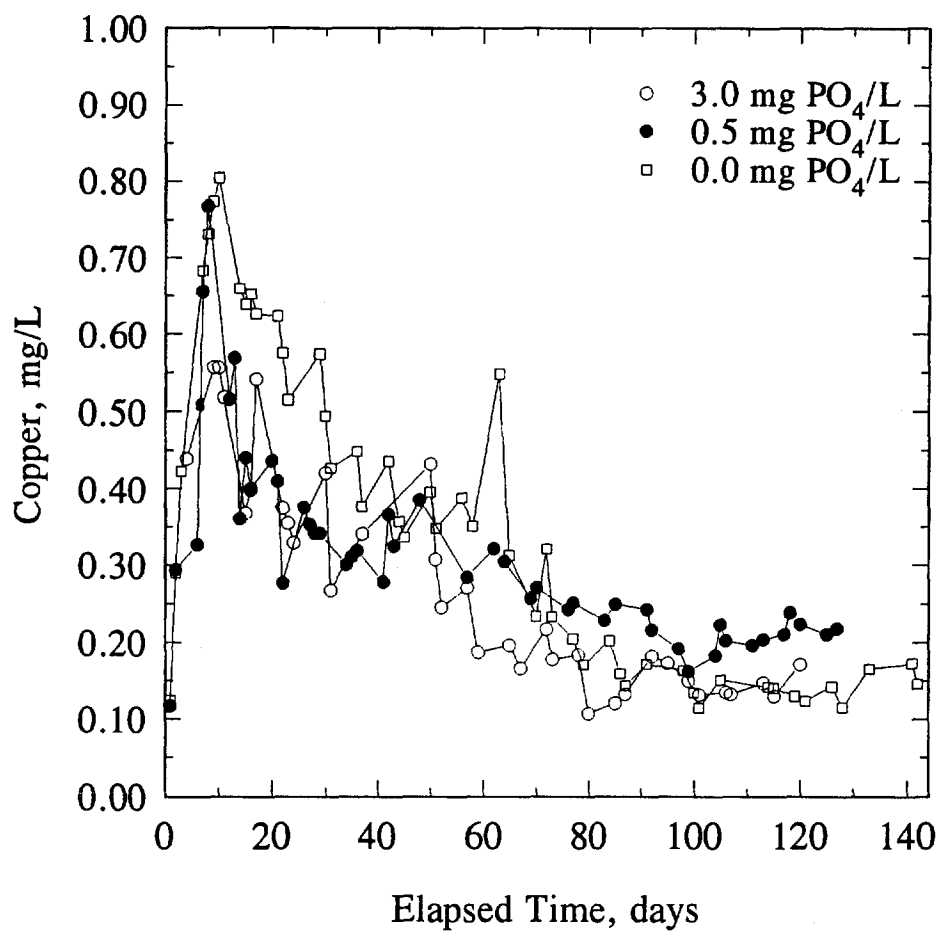


Figure 20. Effect of phosphate on copper leached from C84500 (red brass) coupon at pH 7.5.

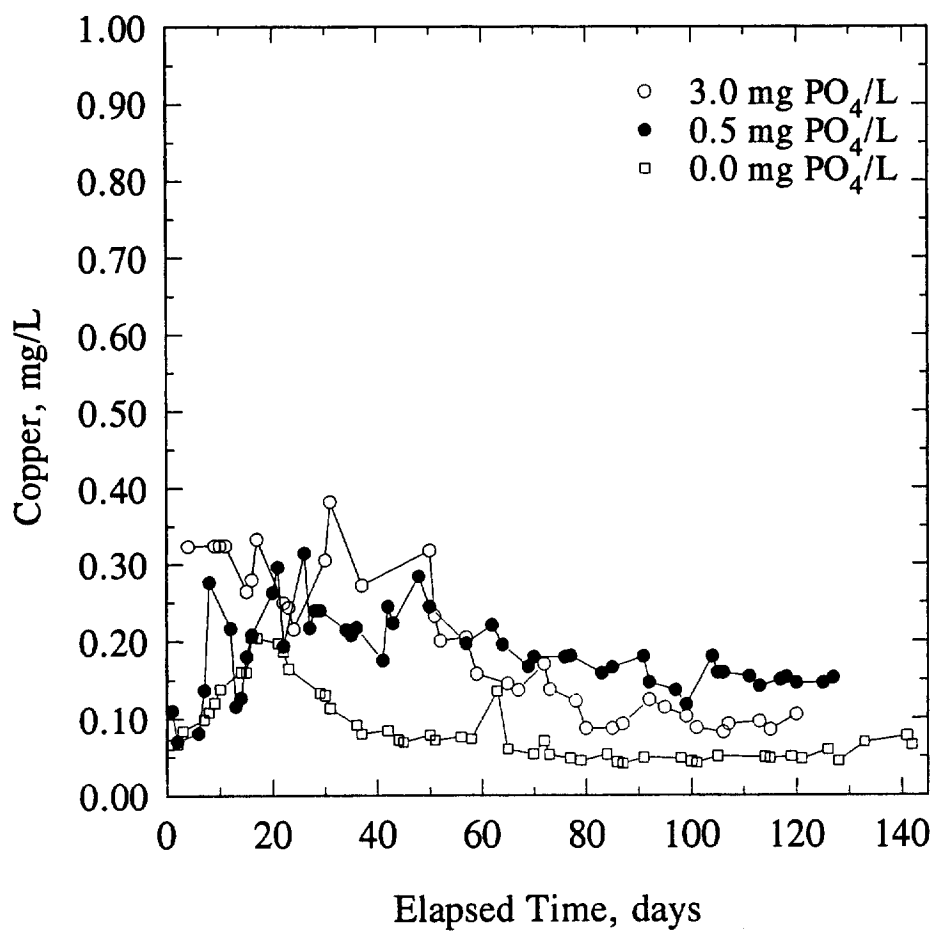


Figure 21. Effect of phosphate on copper leached from C85200 (yellow brass) coupon at pH 7.5.

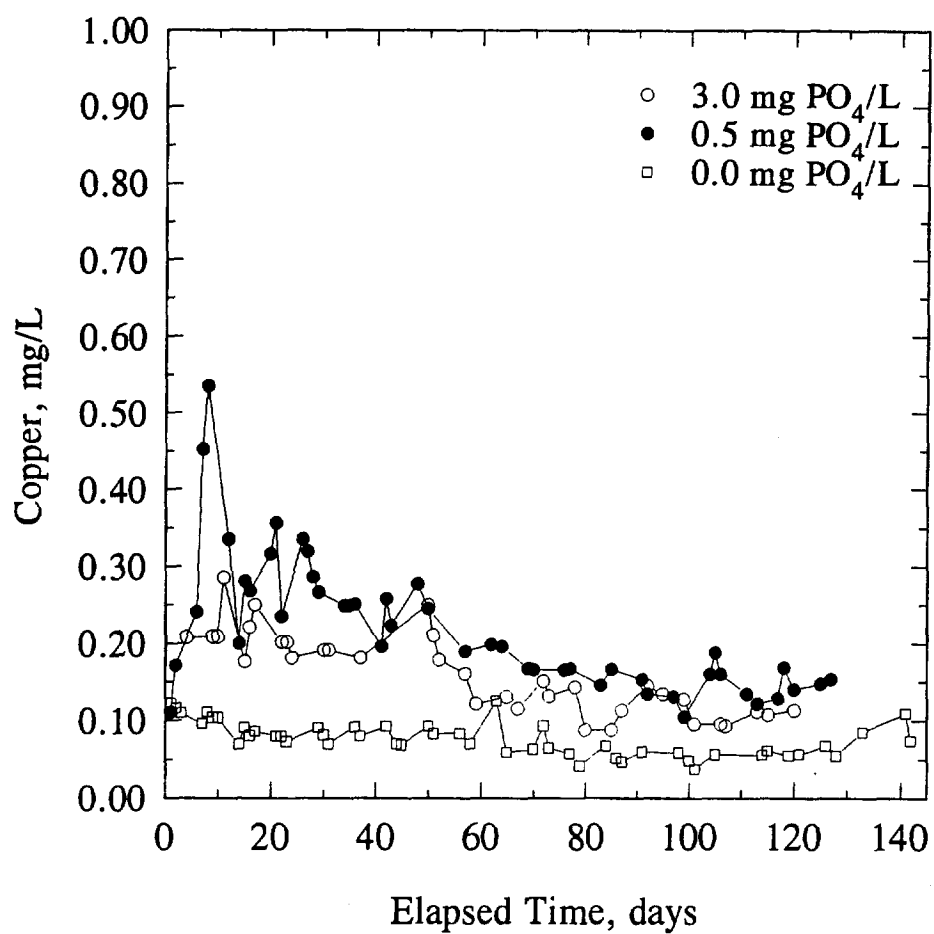


Figure 22. Effect of phosphate on copper leached from C85400 (yellow brass) coupon at pH 7.5.

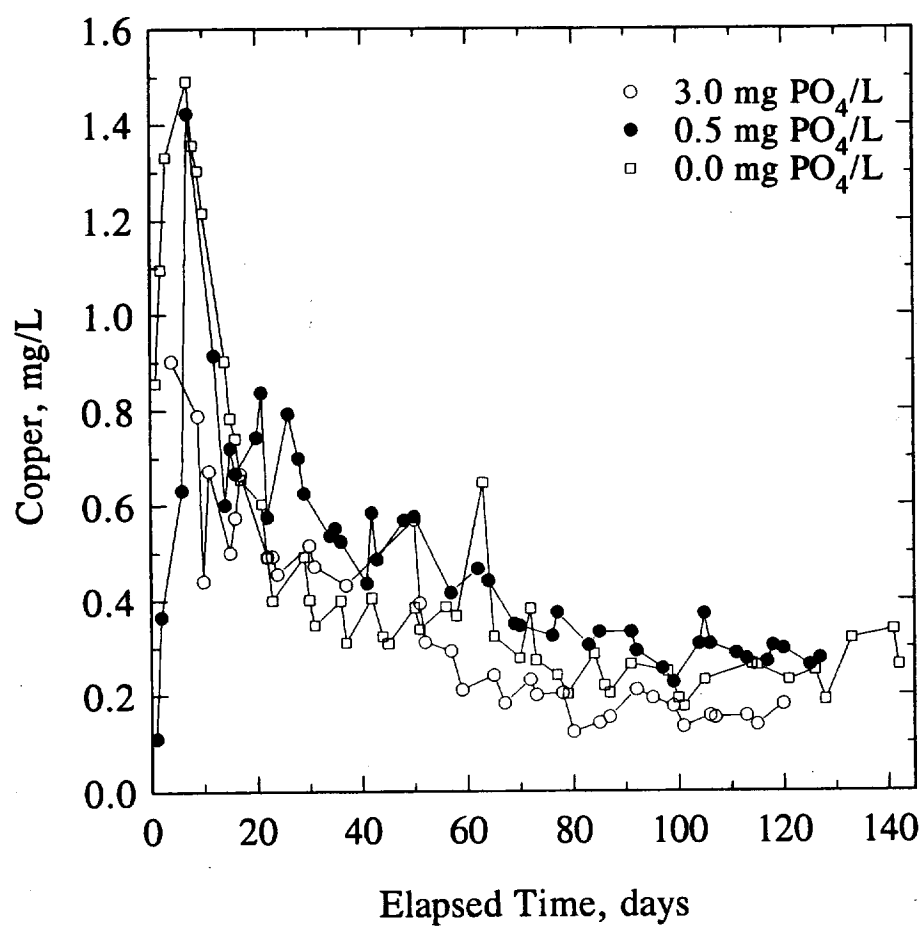


Figure 23. Effect of phosphate on copper leached from C122 (pure copper) coupon at pH 7.5.

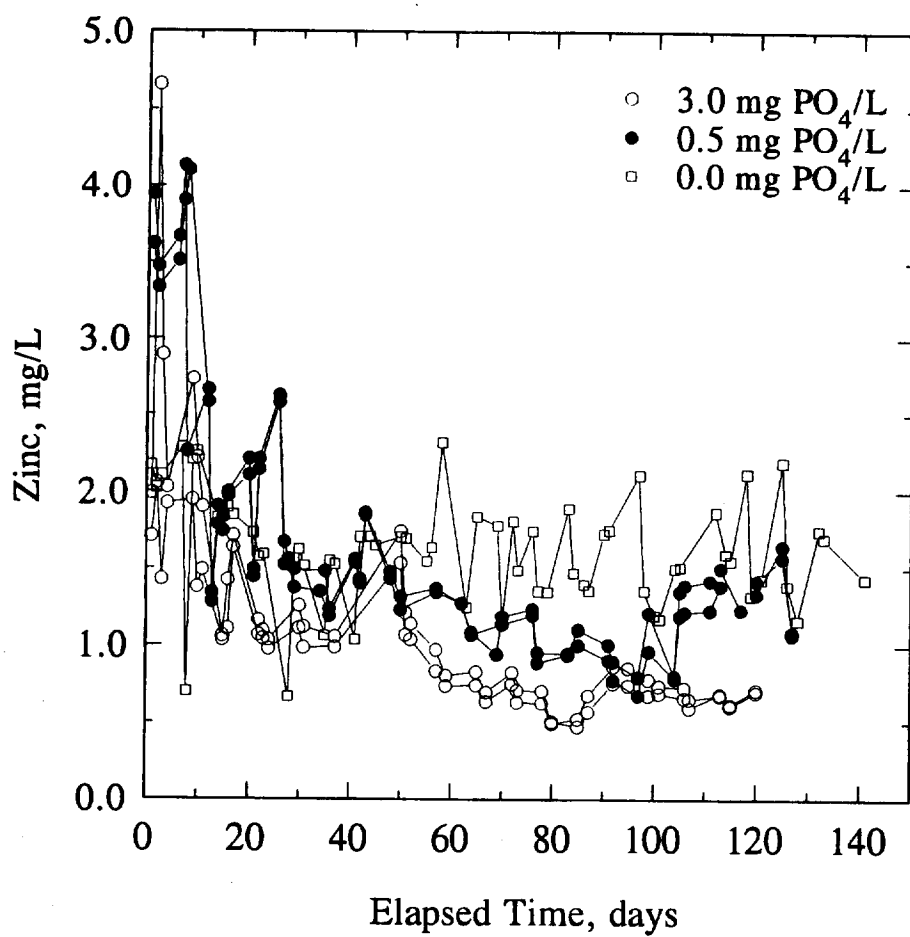


Figure 24. Effect of phosphate on zinc leached from C36000 (free-machining brass) coupon at pH 7.5.



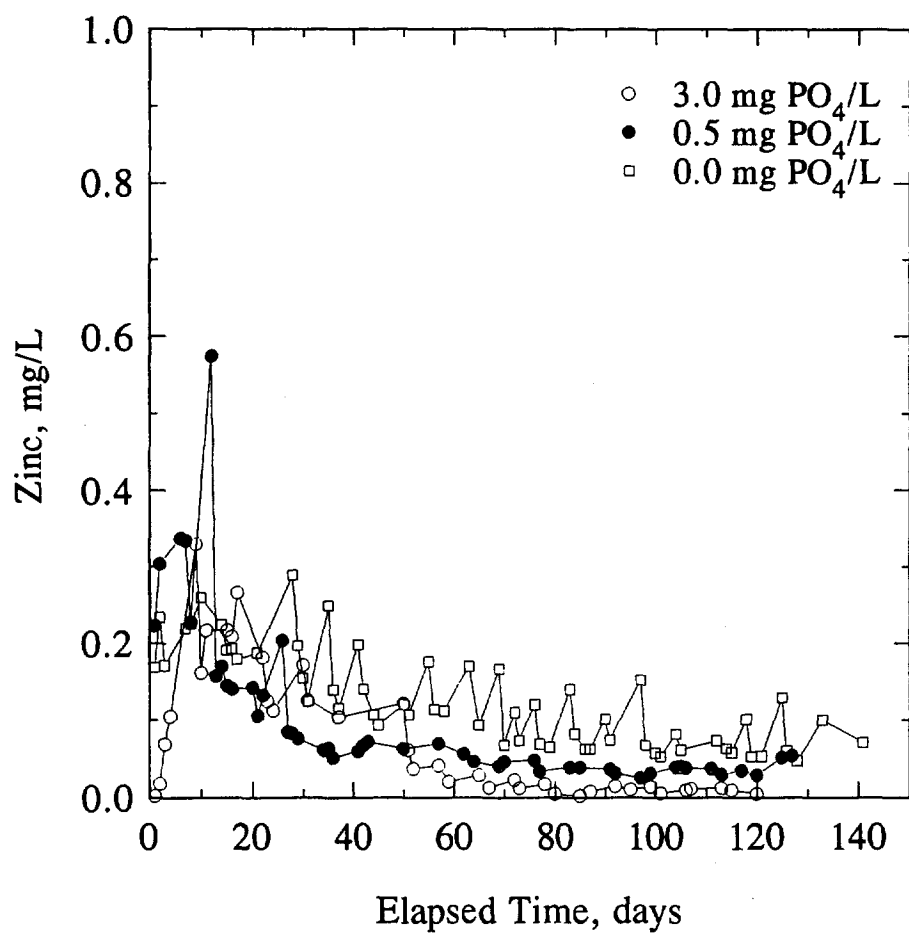


Figure 25. Effect of phosphate on zinc leached from C83600 (red brass) coupon at pH 7.5.

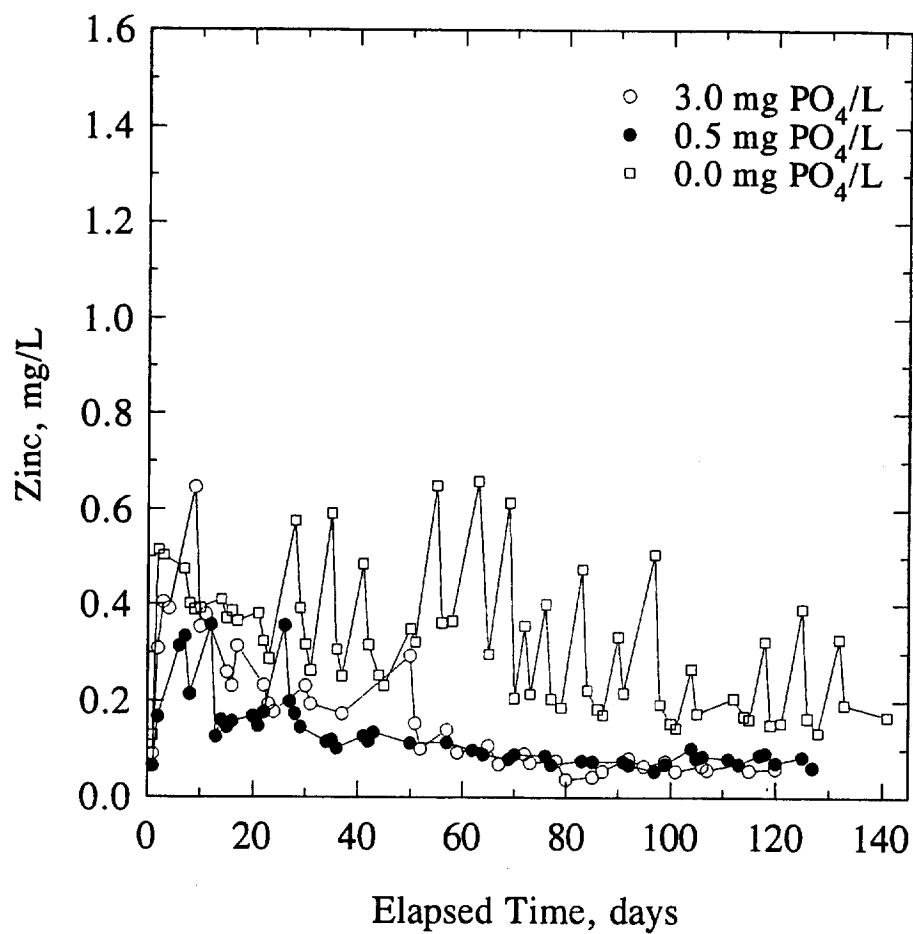


Figure 26. Effect of phosphate on zinc leached from C84400 (red brass) coupon at pH 7.5.

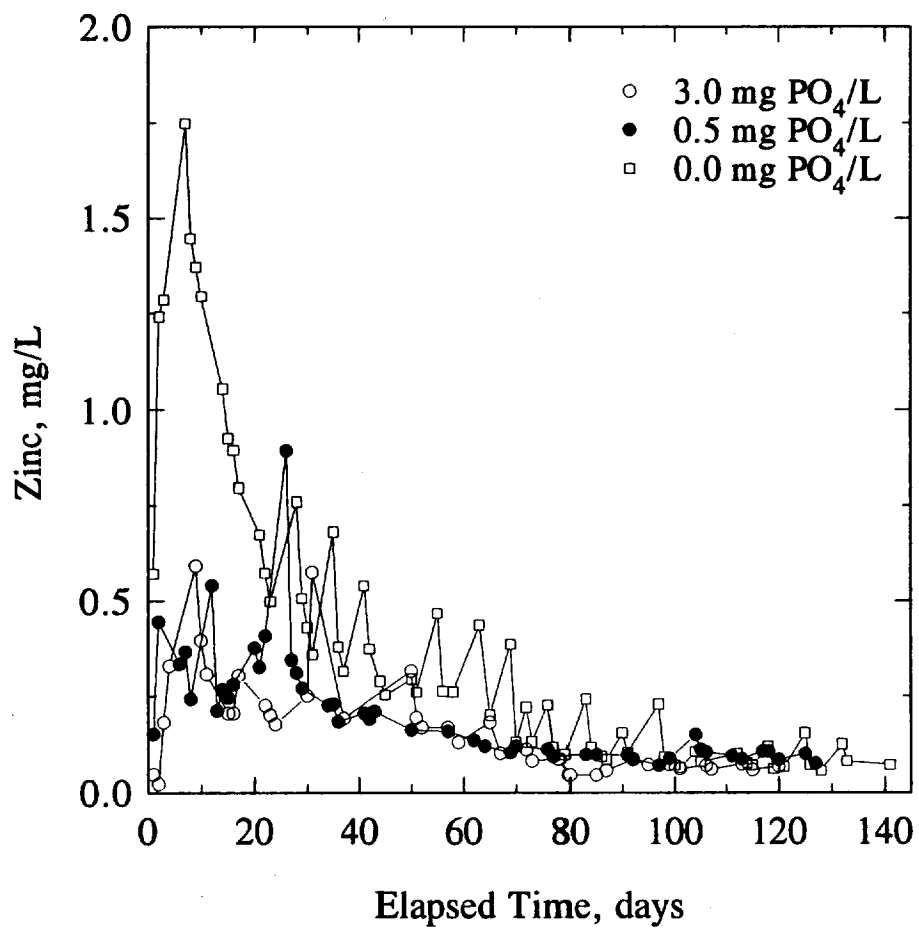


Figure 27. Effect of phosphate on zinc leached from C84500 (red brass) coupon at pH 7.5.

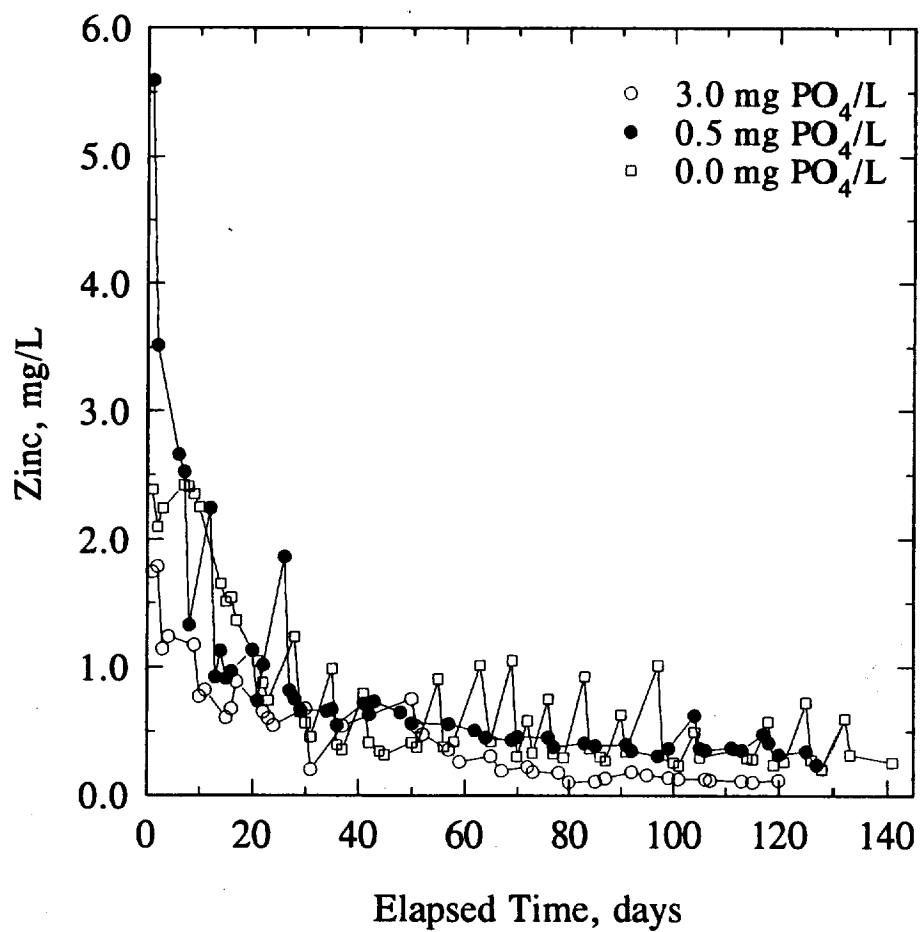


Figure 28. Effect of phosphate on zinc leached from C85200 (yellow brass) coupon at pH 7.5.

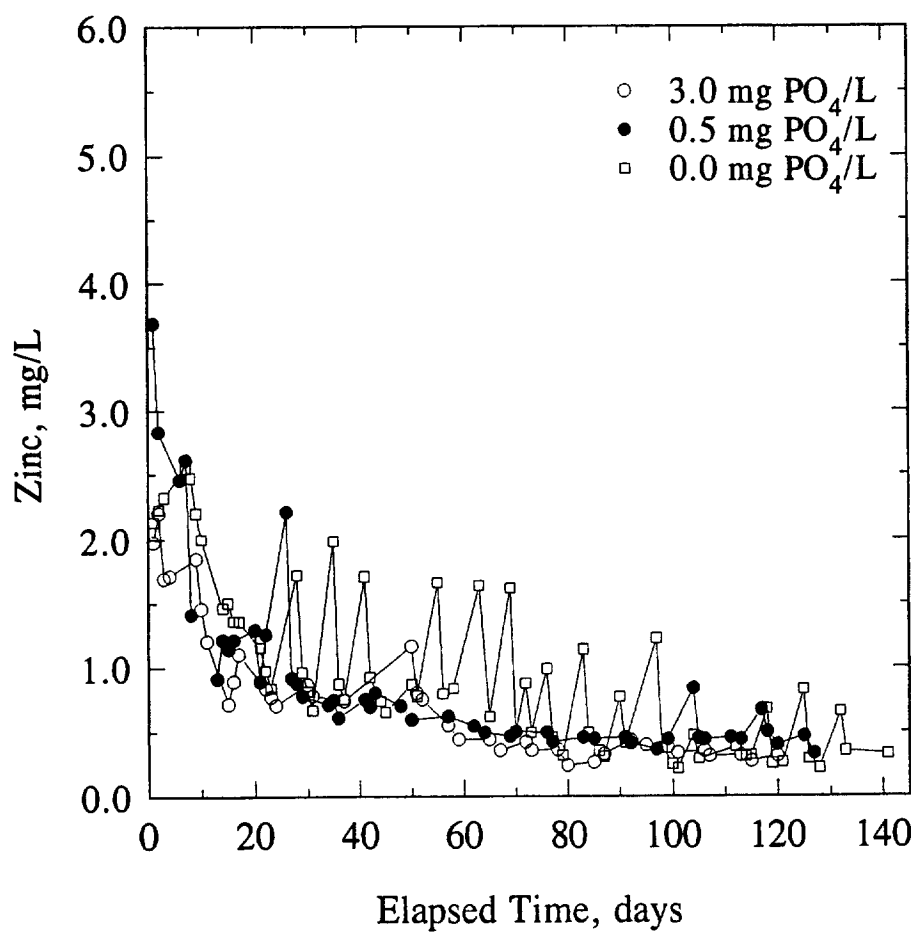


Figure 29. Effect of phosphate on zinc leached from C85400 (yellow brass) coupon at pH 7.5.

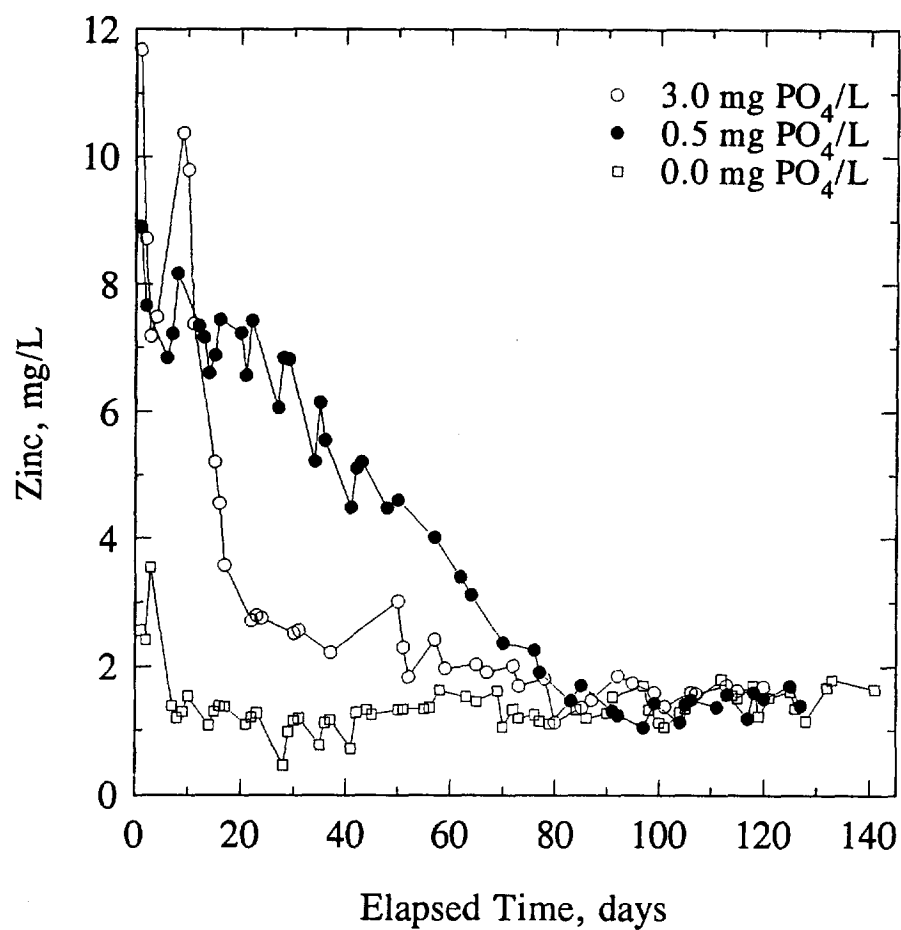


Figure 30. Effect of phosphate on zinc leached from pure zinc coupon at pH 7.5.

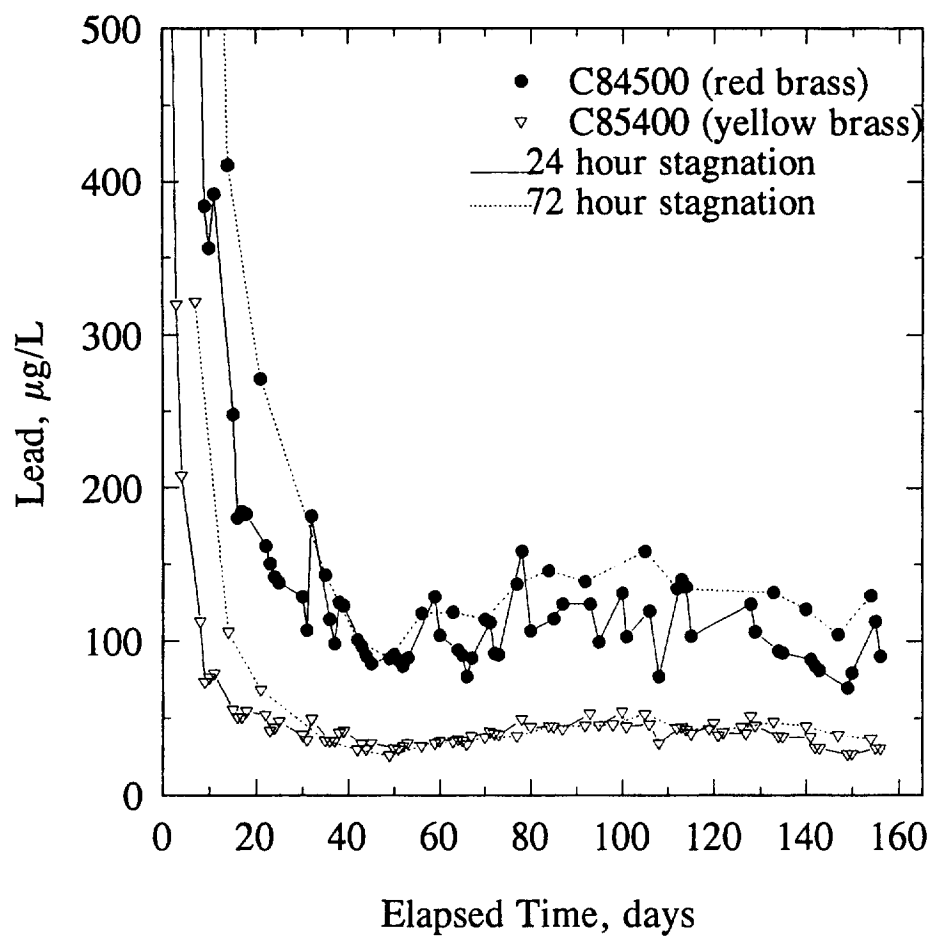


Figure 31. Influence of stagnation time on lead leached from a red and yellow brass coupons during test run 2: pH=7.0.

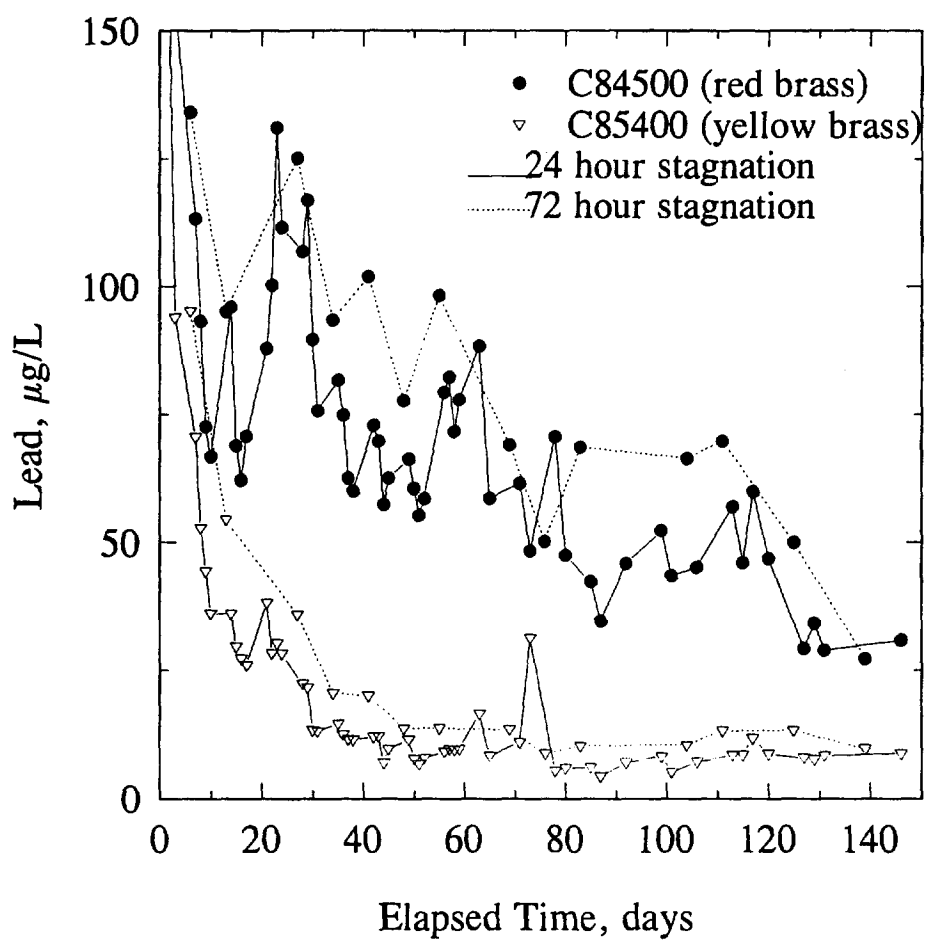


Figure 32. Influence of stagnation time on lead leached from a red and yellow brass coupons during test run 1: pH=8.5.



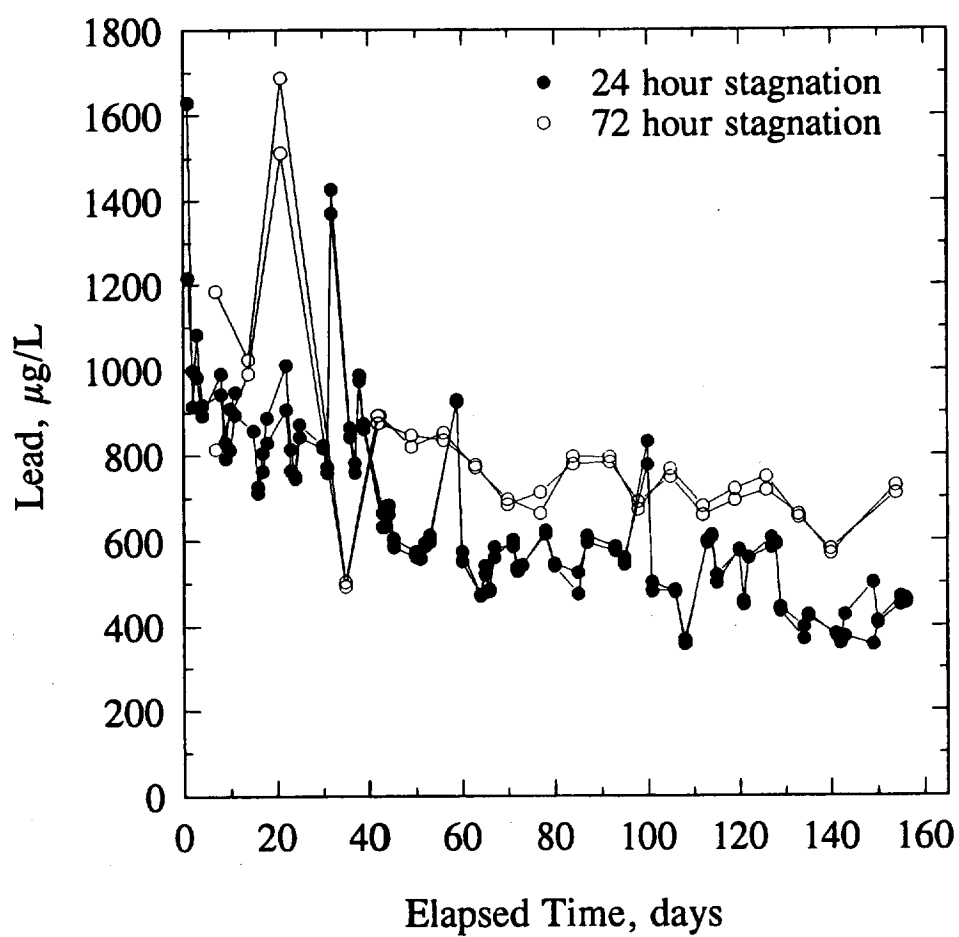


Figure 33. Influence of stagnation time on lead leached from pure lead coupons during test run 2: pH=7.0.

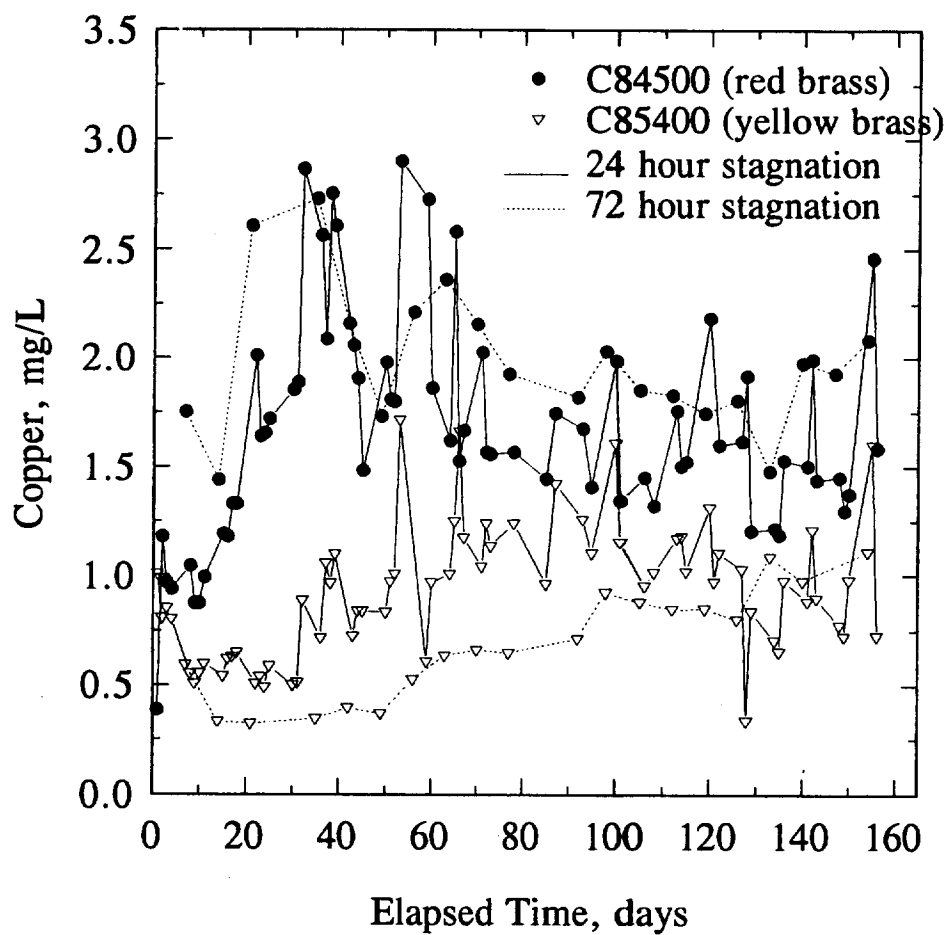


Figure 34. Influence of stagnation time on copper leached from a red and yellow brass coupons during test run 2: pH=7.0.

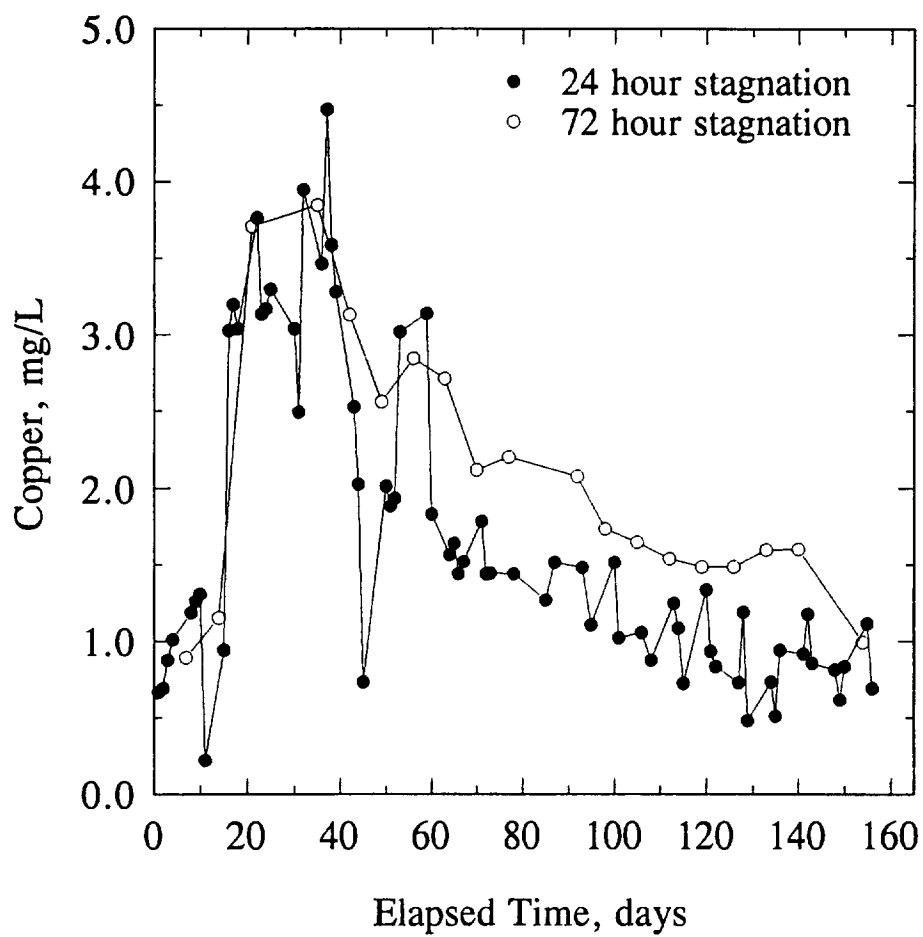


Figure 35. Influence of stagnation time on copper leached from pure copper coupons during test run 2: pH=7.0.

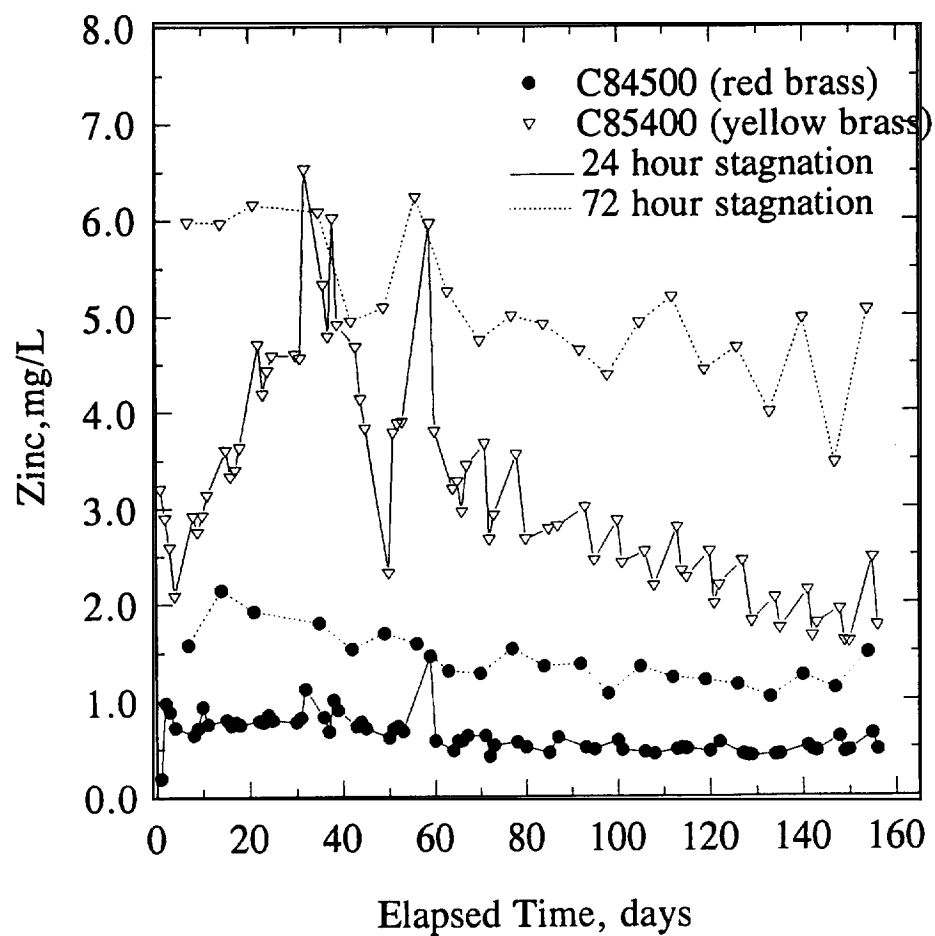


Figure 36. Influence of stagnation time on zinc leached from a red and yellow brass coupons during test run 2: pH=7.0.

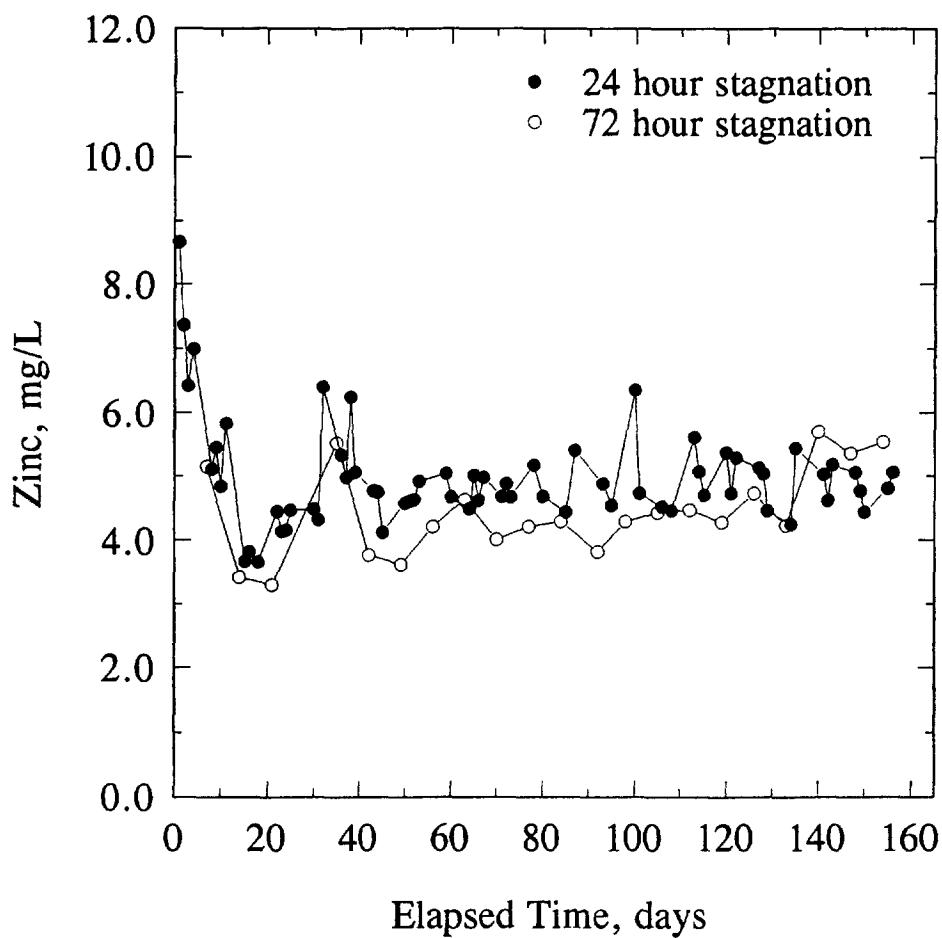


Figure 37. Influence of stagnation time on zinc leached from pure zinc coupons during test run 2: pH=7.0.

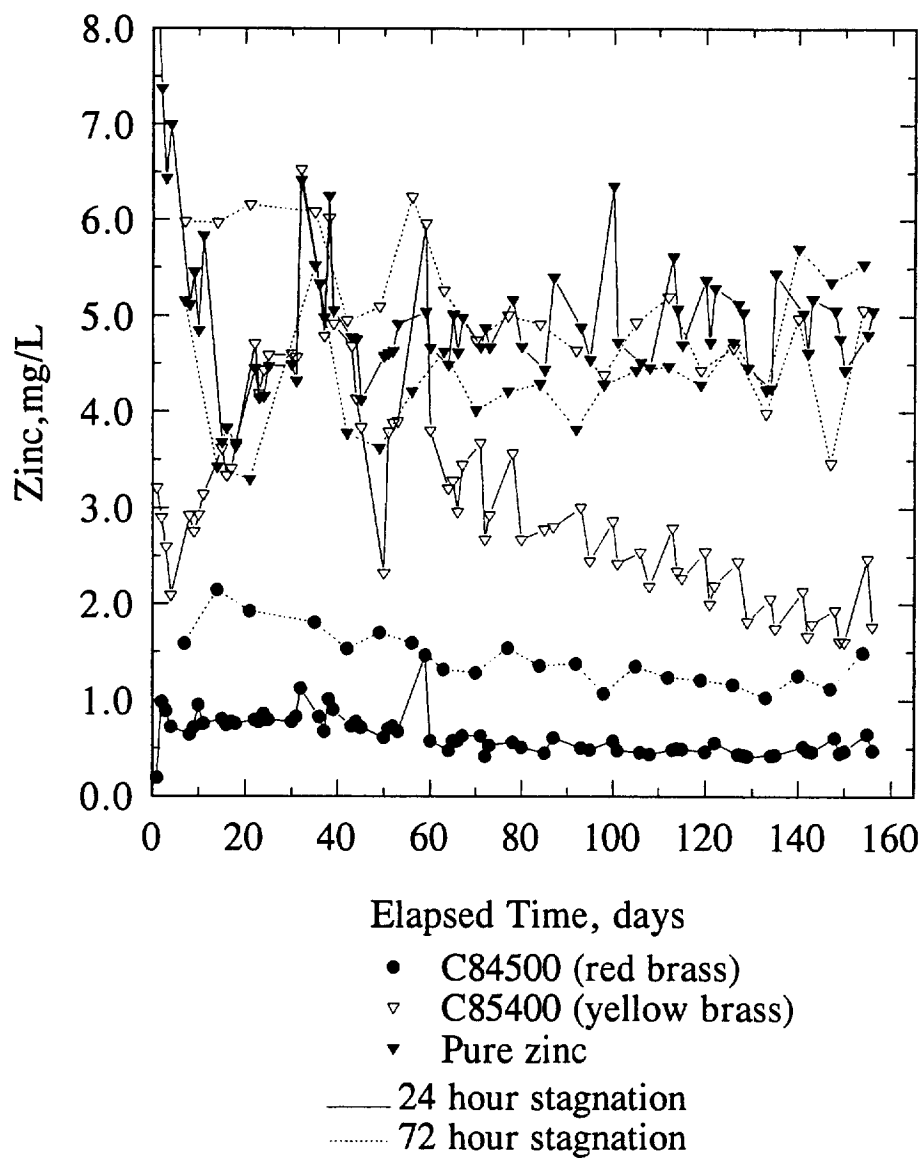


Figure 38. Influence of stagnation time on zinc leached from a red and yellow brass, and pure zinc coupons during test run 2: pH=7.0.

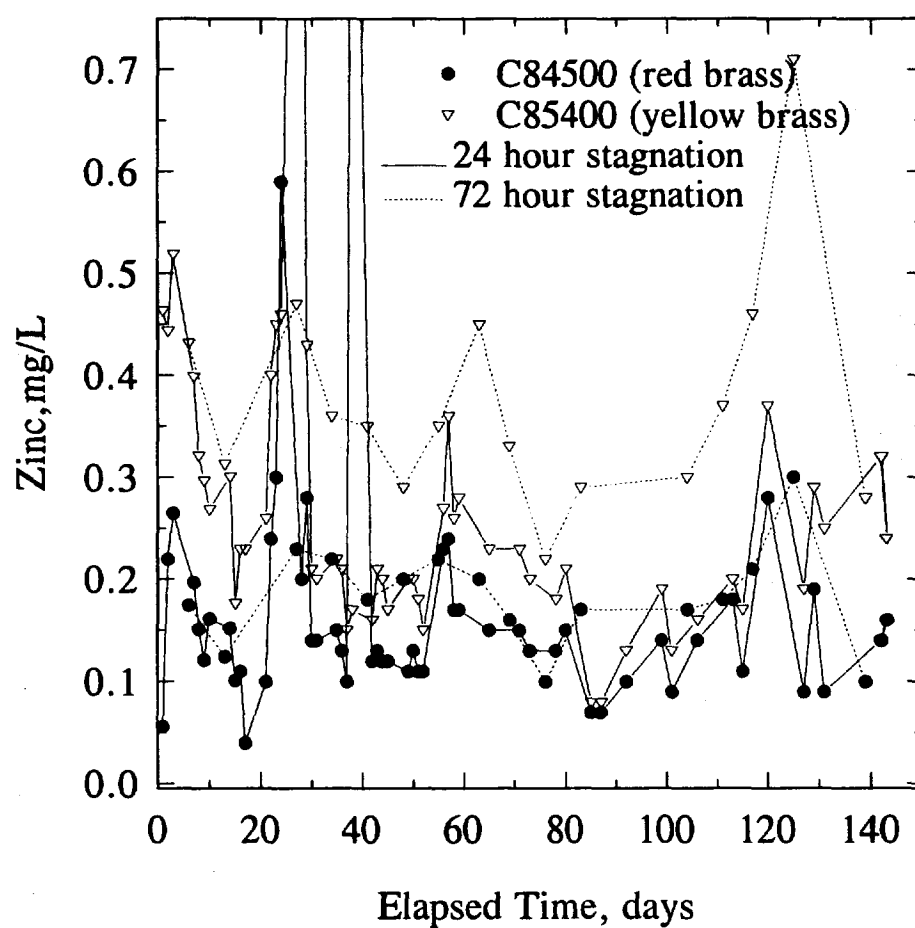


Figure 39. Influence of stagnation time on zinc leached from a red and yellow brass coupons during test run 1: pH=8.5.

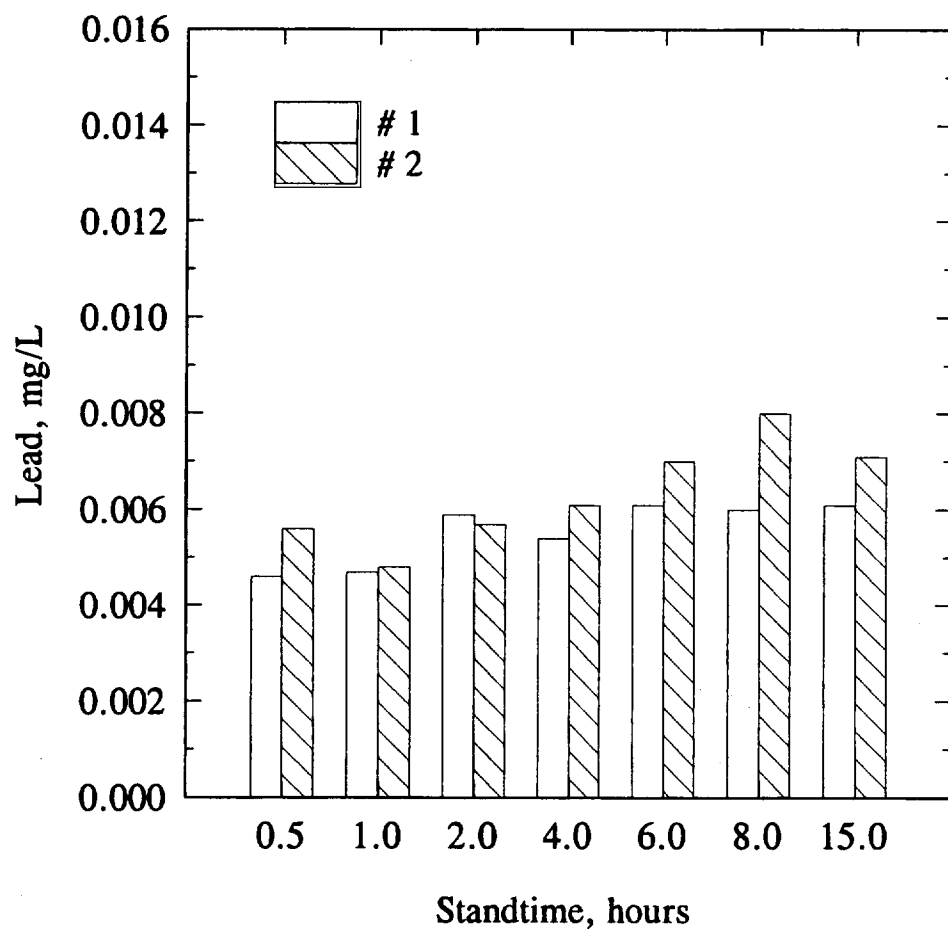


Figure 40. Lead stagnation profile for yellow brass C85200.



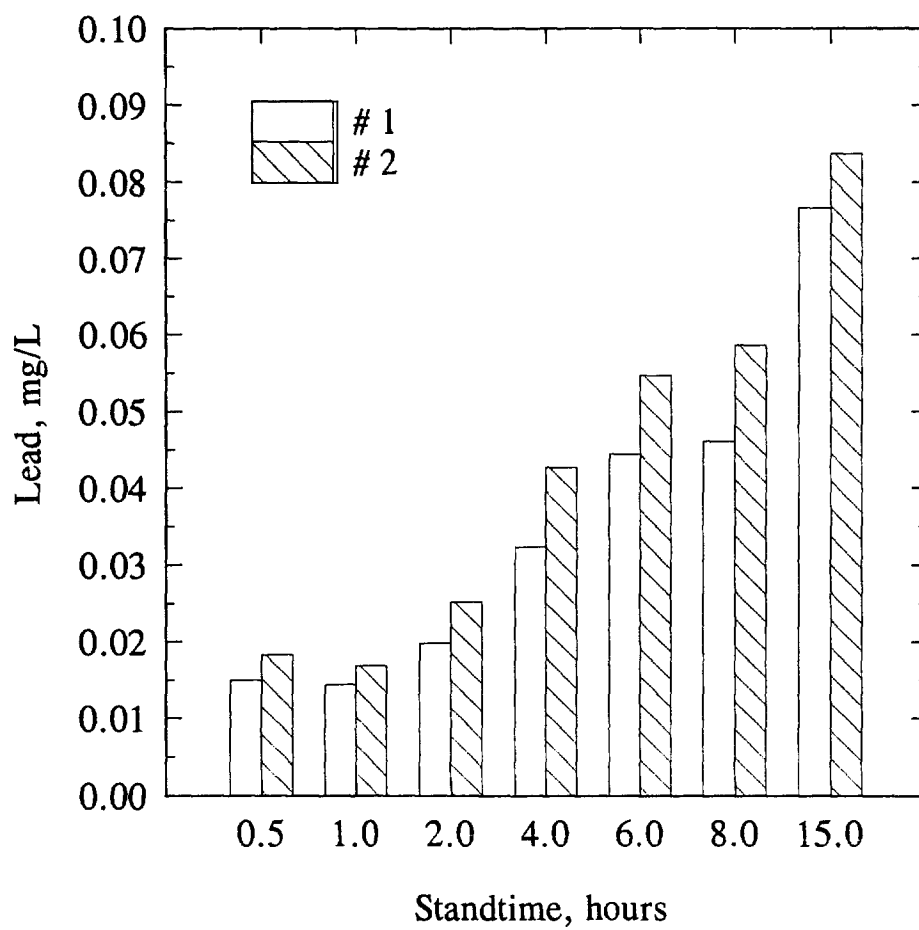


Figure 41. Lead stagnation profile for red brass C84400.

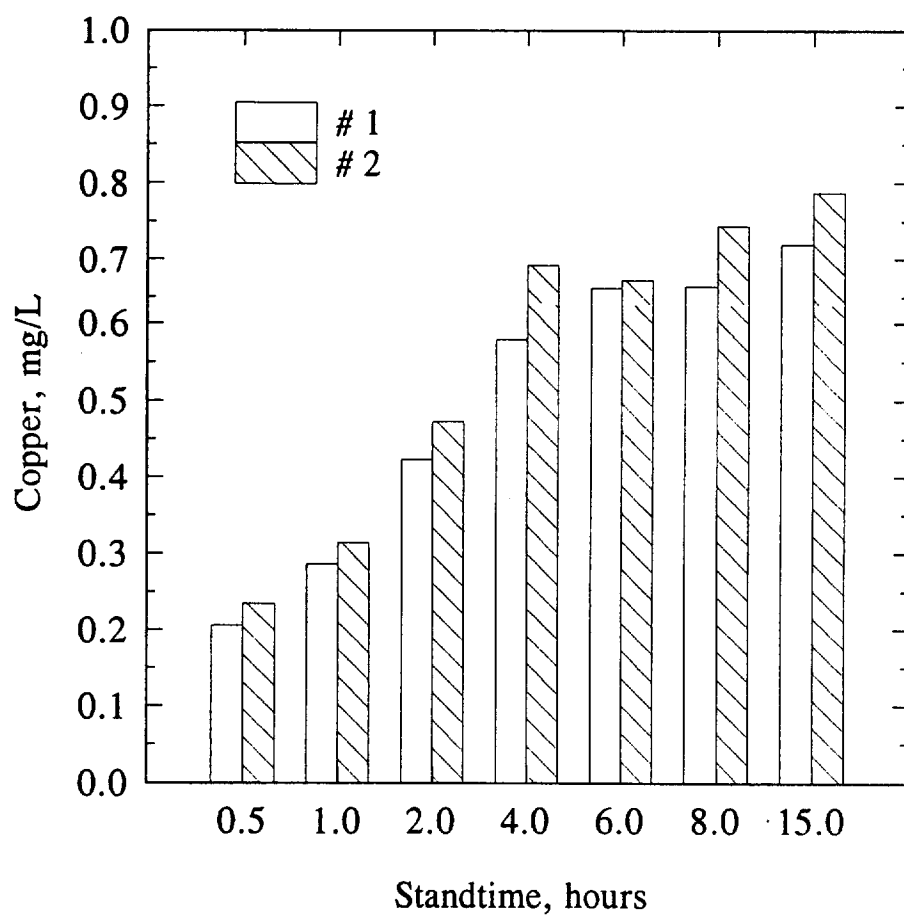


Figure 42. Copper stagnation profile for yellow brass C85200.

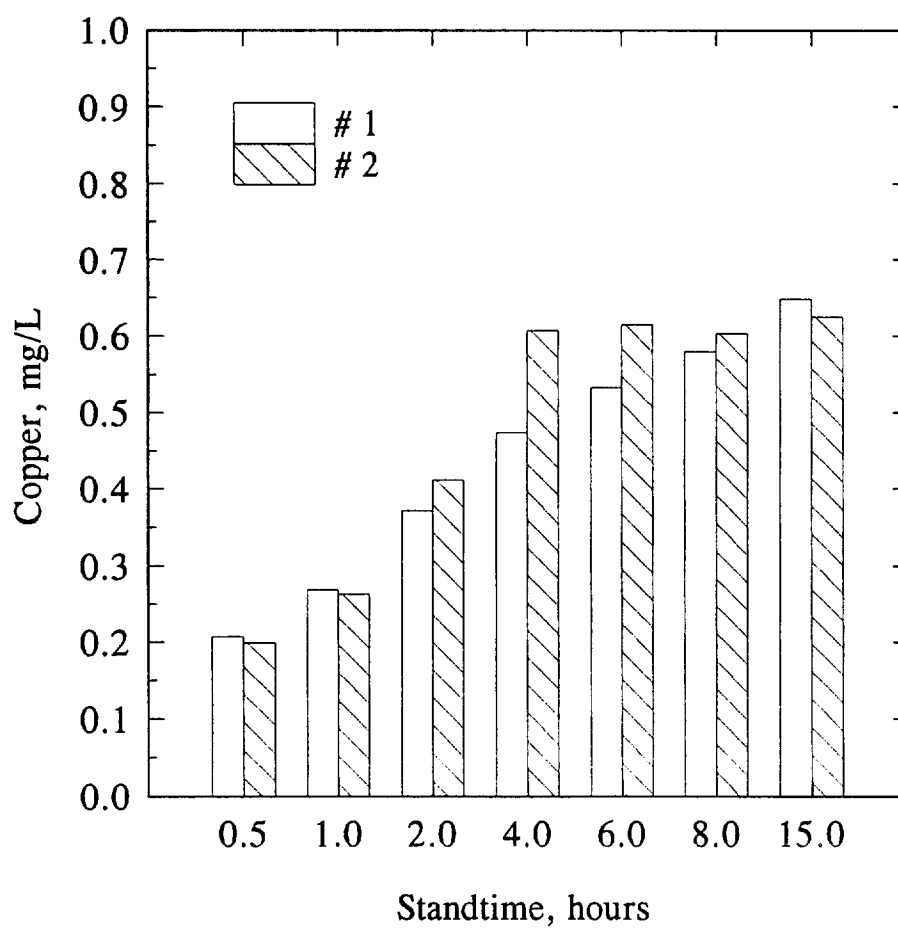


Figure 43. Copper stagnation profile for red brass C84400.

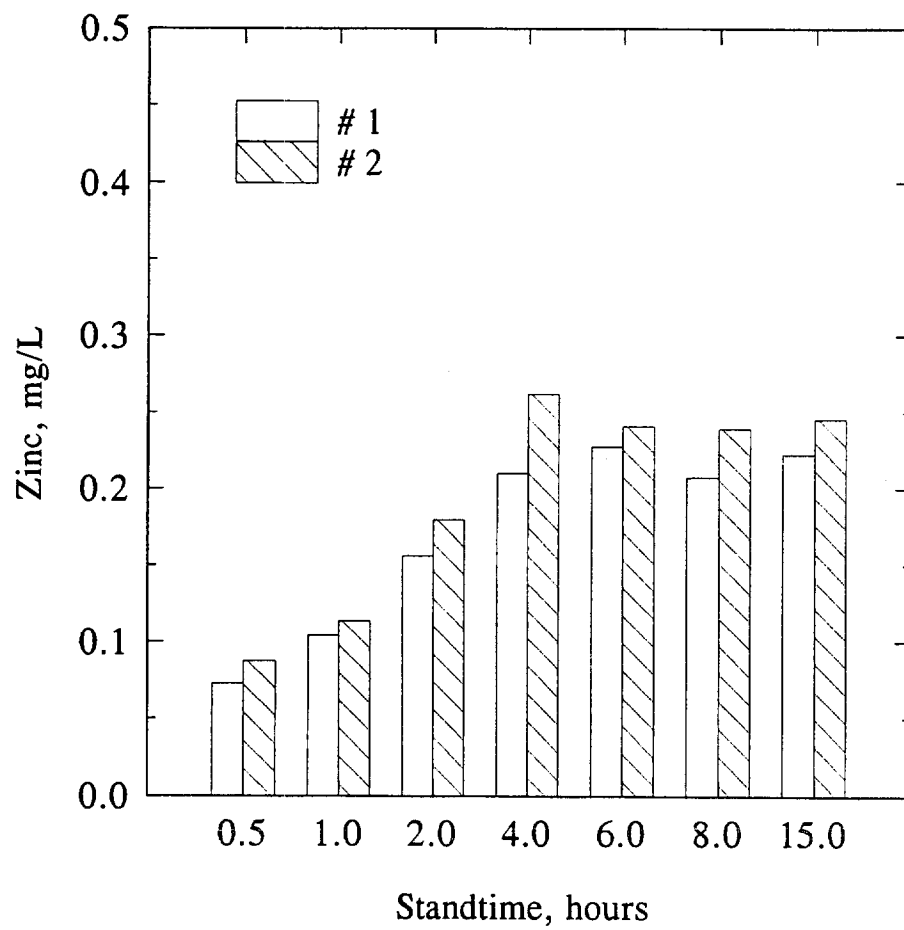


Figure 44. Zinc stagnation profile for yellow brass C85200.

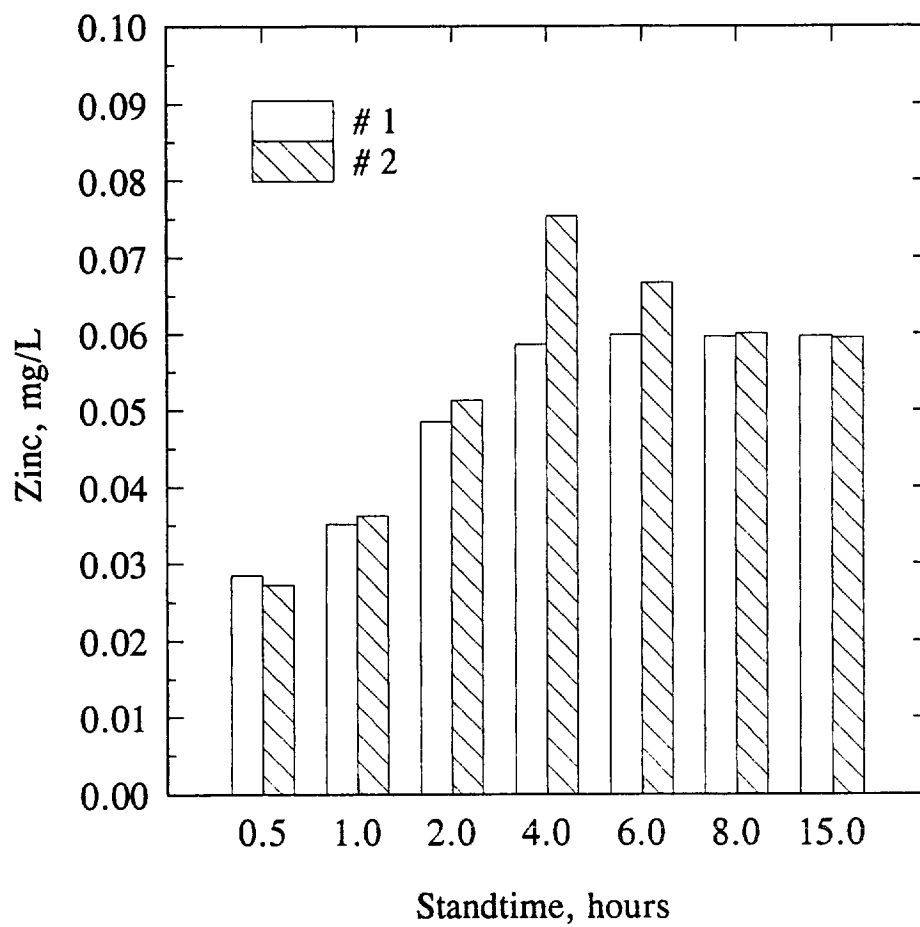


Figure 45. Zinc stagnation profile for red brass C84400.

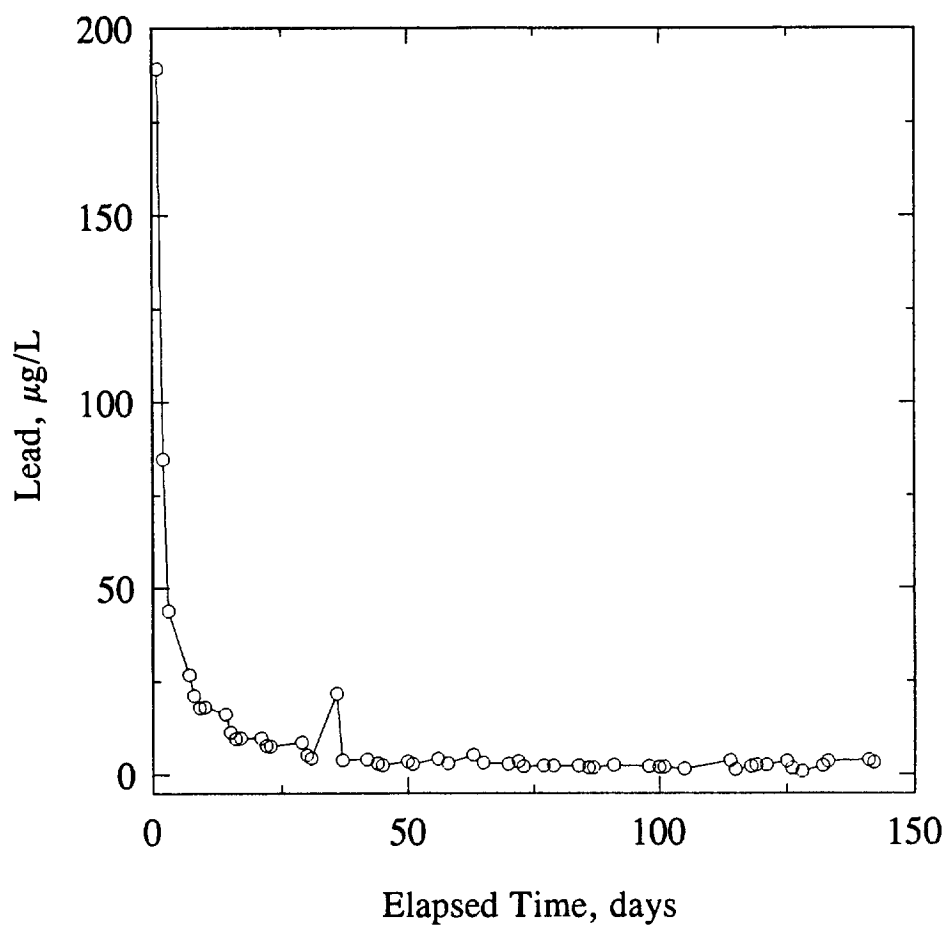


Figure 46. Lead leached from "lead-free" brass during test run 5: pH=7.5.

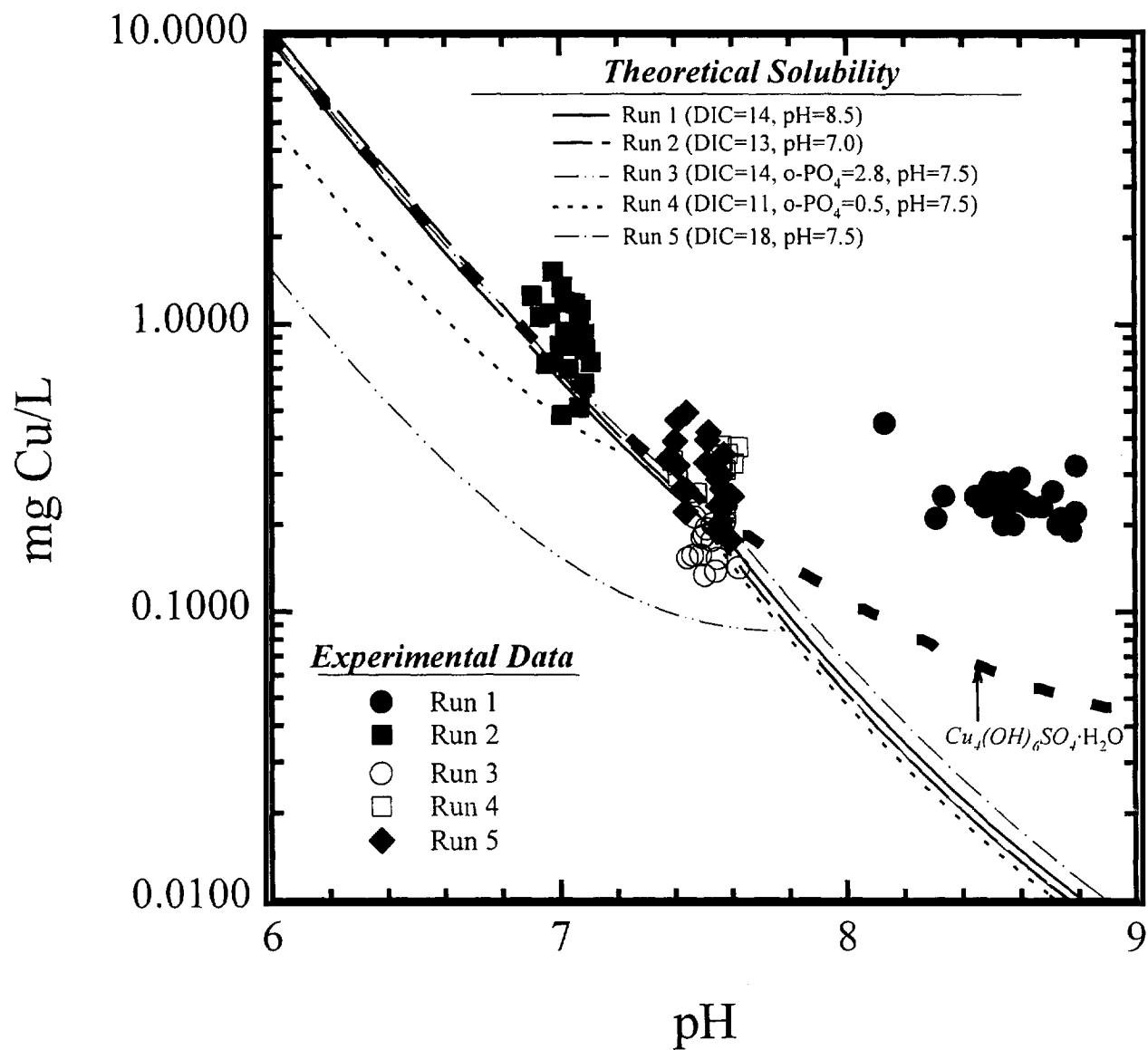


Figure 47. Comparison of theoretical and observed copper levels for coupon study.